EAPS WEEKLY NEWSLETTER
25 March 2019

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BE SURE TO CHECK OUT ALL OF THE EAPS COMMUNICATIONS MEDIA!

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DEPARTMENT NEWS

PLEPS LECTURE: “DECOLONIZING THE EHTICS OF KNOWING”

Dr. Ruiz is an Assistant Professor of Philosophy and is core faculty in Global Studies and the Research Consortium on Gender-based Violence at Michigan State University. She was a research fellow at Institut de Hautes études Internationales et du Développement in Geneva, Switzerland. Her primary areas of research are in Social & Political Philosophy, Feminisms of the Global South and Decolonial Theory. Her work examines the philosophical foundations of violence, the history of structural oppressions, and theories of harm (cultural, epistemic, linguistic, hermeneutic) in the context of violence affecting women and marginalized populations in the Global South. The goal of her research is to expand our current understanding of harms and violence, leading to the development of more inclusive conceptual frameworks for policy assessment and
implementation of humanitarian aid programs, gender-based violence prevention programs, and advocacy legislation.

Thursday, March 28th
Dr. Elena Ruiz
MJIS 1000
3:30 PM

[See attached flyer for additional information]

SCHWARZMAN SCHOLARS TSINGHUA EVENT

Schwarzman representative Christian Tanja will speak to students about this leadership program for a 1-year Master’s in Global Affairs at Tsinghua University in China. Open to U.S. and international students from any major. RSVP here Students off campus may WebEx in via video or phone to hear the information session. Join via WebEx

This is a very competitive program, which requires a high GPA and demonstrated leadership experience. (It is sometime likened to a “Rhodes for China.”) The speaker has also generously offered to hold one-on-one conversations with students while he’s here if they speak with us at Purdue’s National and International Scholarships Office first.

Thursday, March 28
HCRN 1143
6:30PM

Two U.S. students from Purdue have been Schwarzman Scholars finalists and a 2017 Purdue graduate and Chinese national, Jing Su, received the award. She’s now living in Shanghai and happy to talk to other Boilermakers, whether Chinese or not. The program is taught in English, but Jing wrote the Chinese bit at the bottom of this announcement in order to better reach our Chinese Boilermakers.

[See attached flyer for complete details]

GRADUATE STUDENT INTERNATIONAL TRAVEL AWARDS

2019 College of Science Graduate Student International Travel Awards

Application Submission Deadline: 4:00 PM May 31, 2019
For travel between July 1, 2019 and December 31, 2019
~ 2 or 3 awards ranging up to $800 for international travel will be awarded~

Prerequisites:
• must be a full-time PhD student within the Department in the College of Science
• must be making an oral or poster presentation at an international conference

Priority will be given to:
• travel to make an oral presentation at a conference
• attendance at an interdisciplinary conference
• students who have passed their prelims

To apply, please send electronically as one file:
• CV (2 page limit)
• brief summary of research (1 page limit)
• brief statement of purpose for attending conference specifying whether your presentation is oral or poster
• provide web link to conference
• letter of support from research advisor

Send applications to Robin Sipes at rsipes@purdue.edu

{See attached flyer for complete details}

PROPOSALS REQUESTED FOR DATA SCIENCE EDUCATION ECOSYSTEM

The offices of the Provost and the Executive Vice President for Research and Partnerships announce the spring 2019 Integrative Data Science Education Ecosystem request for proposals. The Data Science Education Ecosystem is a part of the University-wide Integrative Data Science Initiative.

The goal of the Data Science Education Ecosystem is to prepare all Purdue students to invent, innovate and lead in a data-driven world.
This will be accomplished not only through curricular and lab activities, but also through learning communities, undergraduate research opportunities, extracurricular opportunities, distinguished guest speakers, and other events that infuse knowledge, skills and abilities about data science.

At the spring 2019 Data Science Education Ecosystem Summit, faculty and staff gathered to share and reflect on what data science education components have been built to date. A list of projects funded by the first-round RFP can be reviewed online.

According to organizers, the purpose of this second-round RFP is to build on the initiatives underway and to fill in areas where gaps exist. Proposed projects should work across departments and colleges. The formation of new or expansion of existing partnerships also is encouraged. Proposals are being accepted through April 22. Budgets may include requests up to $100,000.

More information and specific proposal guidelines are available online.

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**CLIMATE RESEARCH ANALYST**

Rhodium Group is recruiting a research analyst to develop and use Climate Impact Lab climate data processing tools and contribute to the production and dissemination of climate change research. The position will be located in Seattle, Washington or Oakland, California.

**Position Description:**

Rhodium Group is looking for an entrepreneurial and versatile climate researcher with strong programming and data science skills and a desire to learn. You’ll be an integral part of the Climate Impact Lab, an unprecedented collaboration of experts—economists, climate scientists, and computational scientists—from some of the nation’s leading institutions. We at the Climate Impact Lab aim to revolutionize the way global decision-makers think about the costs and risks of climate change.

**Position Responsibilities:**

- Produce python diagnostic tools to do quality assurance on climate data sets
- Evaluate existing and/or develop novel statistical downscaling, bias correction, and pattern scaling techniques for use in impacts assessment
- Develop python code to perform statistical downscaling, bias correction, and pattern scaling of climate model output
- Work with hundred-terabyte data sets using high-performance and distributed computing systems
- Publish papers on climate data science techniques and Climate Impact Lab research in collaboration with Rhodium staff and the Lab
- Help communicate research findings to decision-makers in the public and private sectors

**Qualifications:**

- Master’s degree with research or work experience, or Ph.D. in climate science, atmospheric science, climate modeling, or related field
- Understanding of core climate science topics and experience with statistics
- Research experience using historical and/or global climate model data
- Experience with python data science tools (pandas, xarray, dask preferred)
- Organized and self-directed
- Strong communication skills & ability to collaborate in a multi-disciplinary environment
- Experience working with advanced climate data techniques preferred, such as pattern scaling, statistical downscaling, bias correction, data assimilation
- Experience with high-performance and/or distributed computing systems (SLURM, AWS-EC2) a plus

**Compensation, Benefits And Recruiting Process:**

Rhodium Group offers competitive compensation, a progressive benefits package, and opportunities for intellectual and professional advancement while working with a talented and entrepreneurial group of colleagues. Please submit a cover letter and resume to careers@rhg.com with the subject line: Climate Research Analyst. Additionally, please indicate your availability for an initial
phone interview, salary requirements, available start date and preferred job site location.

About Rhodium:

Rhodium Group is a leading independent research provider. We combine economic data analytics and policy insight to help clients understand global trends. Rhodium’s Energy & Climate team analyzes the market impact of energy and climate policy and the economic risks of global climate change. This interdisciplinary team includes policy experts, economic analysts, energy modelers, data engineers and climate scientists. Our research supports decision-makers in the public, financial services, corporate, philanthropic and non-profit sectors.

OFFICE OF UNDERGRADUATE RESEARCH (OUR) SCHOLARS

The Office of Undergraduate Research (OUR) continues the research scholarship program to recognize undergraduate student engagement in original research, scholarship, or creative work under the guidance of a Purdue faculty or approved mentor. These annual, non-renewable, academic scholarships, in the amount of $1,000 ($500 per semester) and disbursed through the Division of Financial Aid, are funded through an equal matching agreement between the OUR and each of the participating Colleges and Schools.

OUR Scholars are full-time undergraduate researchers who excel in their programs. OUR Scholars are determined for a full academic year and must meet certain program requirements, such as presenting at the annual Undergraduate Research Conference or “Celebrate...” events and attending professional development seminars.

2019-20 OUR Scholars Applications Due March 27, 2019

Website Line: https://www.purdue.edu/undergrad-research/students/OUR-Scholars.php

[See attached flyer for complete information]

CIMMS RESEARCH ASSOCIATE LAND FALLING TROPICAL CYCLONES

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) seeks to fill a Research Associate position for its collaborative research with the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory (NSSL) at the National Weather Center (NWC) in Norman, Oklahoma. The incumbent will contribute to NSSL’s Warn-on-Forecast (WoF) research and development program in predicting hazards associated with landfalling tropical cyclones. The incumbent will work in close collaboration with the researchers at NOAA’s Atlantic Oceanographic and Meteorological Laboratory (AOML) Hurricane Research Division (HRD) in Miami, Florida. The dynamic research and operational working environment at the NWC and HRD will provide the candidate with ample opportunities for career advancement. The position will be located in Norman, OK.

[See attached flyer for complete details]

UCAR NEXT GENERATION FELLOWSHIPS

Each year the University Corporation for Atmospheric Research (UCAR) selects three graduate students from underrepresented communities for fellowships tracks in Earth System Science, Diversity & Inclusion, and Public Policy.

These fellowships offer graduate students the opportunity to learn alongside leaders in their fields. Just as important, these programs bring an infusion of fresh ideas and new perspectives to our organization. Each two-year award provides financial support for graduate school and two summer internships.

THE UCAR NEXT GENERATION FELLOWSHIPS ARE INTENDED FOR GRADUATE STUDENTS:

- attending a North American university
- from underrepresented populations
- holding an undergraduate degree in atmospheric science or a related Earth system science, such as one of the other geosciences, chemistry, computer science,
engineering, environmental science, mathematics, meteorology, oceanography, physics, or social science.

FOR MORE INFORMATION AND TO APPLY, PLEASE VISIT: https://www.ucar.edu/opportunities/fellowships

These awards are for two school years and two summer internships. Fellows receive $20,000 per school year, plus support during the summer internships. Submission Deadline is June 3, 2019. Awards to be announced August 1, 2019.

[See attached flyer for complete details]

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**PREPARING FOR AN ACADEMIC CAREER WORKSHOP**

This workshop is designed specifically for graduate students, post-doctoral fellows, and others who are interested in pursuing academic careers in the geosciences. Workshop leaders from a variety of institution types and career paths will provide guidance and information that will help participants to be stronger candidates for academic positions and to succeed in academic jobs. The workshop is part of Earth Educators’ Rendezvous, where participants may engage in additional workshops, panels, and plenary sessions. To apply, visit the Earth Educators’ Rendezvous website.

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**100th ANNIVERSARY OF THE AMS**

The American Meteorological Society is celebrating its Centennial Year (formed in 1919). Lots of activities being planned throughout 2019, up to the 100th annual meeting in Boston (home of the AMS) on January 12-16, 2020.

Get on board to celebrate the AMS. Here is a portal to enter: https://www.ametsoc.org/index.cfm/ams100/#stories. Scroll down to read a short clip by someone you may know.

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**NCAR ADVANCED STUDY PROGRAM SUMMER 2019 COLLOQUIUM**

The NCAR Advanced Study Program (ASP) is hosting a summer colloquium on “Quantifying and communicating uncertainty in high-impact weather prediction” from 15–26 July 2019 in Boulder, CO.

Purpose: “Every year, the ASP hosts a summer colloquium designed for graduate students on subjects that represent new or rapidly developing areas of research for which good course material may not yet be available. The colloquium brings together lecturers and graduate students to NCAR and generally includes about 25 student participants, and several lecturers from NCAR and the community at large.”

Additional information: https://asp.ucar.edu/asp-colloquia

Application deadline: 1 April 2019 (no kidding)

Application Link: https://www.regonline.com/registration/Checkin.aspx?EventId=2555815

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**12th ANNUAL ECOLOGICAL SCIENCES AND ENGINEERING (ESE) SYMPOSIUM**

Please join us for 12th Annual Ecological Sciences and Engineering (ESE) Symposium on Tuesday, March 26th and Wednesday, March 27th!

This year we’re asking the Purdue and Lafayette communities to face a common question: what do science communication and the science-public interface look like in a “post-truth world?” The Symposium, titled In Data We Trust: Perceptions of Science in a Post-Truth World, will be featured as part of the Purdue Sesquicentennial Ideas Festival addressing a Sustainable Economy and Planet. This year’s Symposium events will focus on science communication (#SciComm) in its many forms and will feature speakers from around the country.

You are invited to join us for the Symposium events. Please visit the links below for each event and RSVP while spaces are available! Visit the ESE.
Symposium website to RSVP and to find more symposium information.

ESE Symposium events:
Tuesday, March 26th @ 6pm at Lafayette Brewing Company Science on Tap presents Science on Display featuring Jamē McCray with art displays by Liz Anna Koziak, Daniel Bird, and others, presented by ESE, the Division of Environmental and Ecological Engineering, and the Illinois-Indiana Sea Grant

Wednesday, March 27th on Purdue’s campus
How to Illustrate Your Science (1:30 pm - 2:45 pm, STEW 214) featuring:
Liz Anna Koziak, Ph.D student, Nelson Institute of Environmental Studies, University of Wisconsin-Madison
The Future of Science Communication - A moderated panel (3:00 pm - 4:30 pm, STEW 214 or 218 - TBD) featuring:
Dr. Jeff Dukes, Director of Purdue Climate Change Research Center; Professor of Forestry & Natural Resources & Biological Sciences, Purdue University
Sarah McNanulty, Ph.D candidate, University of Connecticut; Founder of Skype a Scientist
Dr. Jamē McCray, Environmental Social Scientist, Sea Grant
Katie O’Reilly, Ph.D candidate, University of Notre Dame; 2018 Sea Grant Knauss Marine Policy Fellow
Dr. Shari Rudavsky, Health and Medicine Reporter, Indianapolis Star
Symposium Keynote: Science in a Fact-Free World (7:30 pm - 9:00 pm, Hiler Theater - WALC) featuring:
Dr. Katharine Hayhoe, Director of the Climate Science Center at Texas Tech; Professor in Public Administration, Texas Tech University

Dr. Hayhoe’s talk is being hosted in a small theater on campus to promote a lively discussion of these challenging issues, and interested members of the public and Purdue affiliates are encouraged to reserve a seat while space remains.

Ideas Festival - other opportunities to get involved:
Monday, March 25th on Purdue’s campus
Poster Session hosted by the 150th Ideas Festival, Agricultural and Biological Engineering, Campus Master Planning and Sustainability, and Ecological Sciences and Engineering Symposium – click here for more information.

If you have any questions about the ESE symposium please contact ese@purdue.edu.

2019-20 GEODATA SCIENCE FOR PROFESSIONALS MS PROGRAM

Employers seek in today’s advanced Science, Technology, Engineering, and Mathematics workforce skills in analytics and data science, including Big Data (Denecke, D. et al. 2017, Council of Graduate Schools). In the United States, however, geoscience curricula are in general not designed to capitalize on the digital revolution, especially the enormous growth in data science. Thus, there has been a disconnect between the jobs of the future and the curricula of the present.

Data science is highly technical and requires rigorous preparation in mathematics, statistics and computing. Specifically, in the context of geosciences, data science applied with the goal of improving the understanding of causal relations in physical systems also promotes better predictions, therefore risk assessments.

In response to the Purdue campus-wide datascience initiatives and the College of Science strategic plan, the Department of Earth, Atmospheric, and Planetary Sciences (EAPS) is prioritizing data science training, with applications to climate, weather forecasting, environmental science, natural resources, and energy data for decision-support and decisionmaking in the public and private sectors.

A key outgrowth of this initiative is the EAPS Master’s Concentration of Geodata Science for Professionals (GDSP), integrating rigorous academic coursework, high-performance big data-science computing environments such as Hadoop systems and GPU computing, with real-life research and work experiences.

Spring 2020 deadline is October 15, 2019

Link: http://www.eaps.purdue.edu/gdsp/docs/PurdueEAPSGDSPBrochure2019.pdf

[See flyer for more information]
2019 SUMMER INTENSIVE ON COMMUNITY ENGAGED SCHOLARSHIP

ATTENTION: EARLY CAREER FACULTY AND ADVANCED GRADUATE STUDENTS

Michigan State University’s Office of University Outreach and Engagement is hosting a Summer Intensive that will focus on community-engaged research and community engaged teaching and learning, including service-learning and community-based research in classes. The Summer Intensive is composed of interactive workshops, lunches in disciplinary clusters and with senior community engaged scholars, dialogue with community partners, and time to develop your own community engagement plan for your return to campus.

Application deadline: Friday, April 5, 2019
Applications include the online form, short biography, statement of interest, nomination forms, and release form.

[See attached flyer for complete information]

NWP SCIENTIST/MODELER POSITION

Radiant Solutions ([https://www.radiantsolutions.com/](https://www.radiantsolutions.com/)) has an opening for a NWP Scientist / Modeler that we hope some on this listserv may be interested in. The job requisition is posted here: [https://digitalglobe wd1 myworkdayjobs.com/en-US/Radiant_Solutions_Careers/job/Gaithersburg/Numerical-Weather-Prediction-Scientist_R02949-1](https://digitalglobe wd1 myworkdayjobs.com/en-US/Radiant_Solutions_Careers/job/Gaithersburg/Numerical-Weather-Prediction-Scientist_R02949-1)

For those unfamiliar with our group, the weather division within Radiant Solutions has formerly been called MDA Weather Services (~2005-2017) and EarthSat Weather (pre-2005). We’ve been in operation for 40+ years, and predominantly support customers in Energy, Agriculture, and Trading.

JOB DESCRIPTION

Radiant Solutions has an immediate opening for a Numerical Weather Prediction Scientist in our Gaithersburg, MD location. This position will serve an integral role in Radiant’s commercial business group as a part of a team of highly motivated and forward-thinking atmospheric and data scientists. The applicant will help build a next-generation high-performance weather data platform that serves numerous internal and external applications. If you have a passion for the atmospheric and geospatial sciences in addition to building and working with high-performance computing environments, then we have an exciting opportunity for you.

Required qualifications:
• 5+ years experience developing, refactoring, manipulating, and compiling global numerical weather prediction (NWP) modeling systems on various high-performance computing (HPC) platforms
• Well-developed understanding of scientific programming using Fortran, C/C++ and related parallelization via Message Passing Interface (MPI) such as MPICH and IMPI
• Adept scripting ability in various Linux shells such as bash, KSH, and CSH
• Knowledge of multi-/many-core computer architectures, compilers, and supporting libraries and their application in NWP
• Demonstrated ability running massively parallelized programs using processing workflows such as Rocoto and queue-based systems such as Sun Grid Engine or SLURM
• Familiarity in building, configuring, and maintaining HPC environments, including cloud-based HPC, for use with NWP applications
• Awareness of recent developments surrounding computer architecture and HPC

Desired qualifications:
• Knowledge of manipulating multi-dimensional datasets in GRIB (1/2) or netCDF formats
• Familiarity of Amazon Web Services (AWS) and related services such as EC2, S3, EBS, and EFS
• Experience with programming in Python
• Experience creating graphics with GrADS and/or various Python data science libraries
• Exposure to commercial and open source GIS software/libraries including ESRI ArcGIS, Erdas Imagine, QGIS, GeoServer, and GDAL
• Familiarity with version control software (Git)
• Understanding of raster and vector data set creation
• Experience working with customers and strategic partners to understand their needs
• Excellent written and oral communication skills
**Education:**
- Masters /PhD (preferred) in atmospheric or computational science

**Periodic travel required to attend:**
- Industry conferences
- Meetings with partners
- Meetings with customers

To be qualified you must be a US Citizen.

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**2019 VIRTUAL GRAD FAIR & GLOBAL SYMPOSIUM FOR ONLINE PROGRAMS**

The 2019 Virtual Graduate Fair and Global Symposium for Online Programs is scheduled for **Tuesday, March 26, 2019 from 10 a.m. – 5 p.m. EST.** Students will:
- get an inside look at graduate school and the application process,
- view videos and presentations from experts about graduate school opportunities, and
- attend a premier virtual graduate school fair and network with representatives some of the nation’s top graduate institutions, including Purdue, Indiana, Northwestern, Chicago, Notre Dame, Maryland, Illinois, and Michigan.

Prospective students participating in this event can apply to a Purdue Online Master’s program for **Free!**

This one-day mini-conference is especially designed for students who are looking for advanced degrees in:
- Engineering
- Technology
- Education
- Communications
- Hospitality and Tourism Management
- Public Health and Health Administration
- Other Related disciplines

The 2019 Virtual Grad Fair for Online Graduate Programs offers a waiver for the Purdue University Graduate application fee to encourage participation. For more information, please contact virtualgradfair@purdue.edu or see the flyer on our website.

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**PhD POSITION IN ATMOSPHERIC MODELLING OVER COMPLEX TERRAIN**

The Atmospheric Dynamics group of the Department of Atmospheric and Cryospheric Sciences (ACINN) at the University of Innsbruck (Austria) invites applications for a PhD position in the field of mountain meteorology.

The PhD student will work in the project “Atmospheric boundary-layer modeling over complex terrain (ASTER)”, led by principal investigator Dr. Manuela Lehner. The objectives of the project are (i) to evaluate the performance of a numerical weather prediction model in forecasting soil properties and surface and near-surface turbulent fluxes over complex terrain and (ii) to evaluate the model’s sensitivity to changes and potential errors in the turbulence and land surface parameterizations and their input parameters over complex terrain. Numerical weather prediction relies heavily on these parameterizations to represent the exchange of heat, moisture, and momentum between the ground and the atmosphere and within the atmospheric boundary layer at spatial scales that are not resolved explicitly by the model. Current parameterizations, however, are not necessarily adequate for complex mountainous terrain and the spatial resolution of required land cover datasets is often not sufficient to represent the land use correctly. The PhD student will focus on the first of the above objectives by performing case study simulations for the regions of North and South Tyrol with WRF and quantifying the model performance based on observational data.

[For complete information see attached flyer]

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**2019 SPRING RECEPTION**

Calling all graduate students!

Submit an application to present a poster at the Office of Interdisciplinary Graduate Programs 2019 Spring Reception

**Wednesday, May 1, 2019**
10:00 AM - 12:00 PM
North & South Ballrooms, Purdue Memorial Union
A celebration of graduate research at Purdue

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http://www.eaps.purdue.edu/
WEATHER SCIENCE RESEARCH LEAD

The Climate Corporation leads the industry in providing digital agriculture solutions for growers to manage their data, as well as to derive insights from their data for maximizing productivity, efficiency and sustainability. We are seeking an exceptional candidate to organize and lead a small Weather Science research team. This role will be responsible for prioritizing and developing a research plan combining existing and novel efforts into a coherent research program focused on incorporating all key aspects of atmospheric science, agronomic practices and environmental characteristics. The successful candidate will be responsible for guiding a team of science experts who can combine atmospheric, environmental and management data using novel modeling frameworks and approaches to improve our understanding of agriculturally limiting factors.

What You Will Do:

• Exploratory data analysis, data cleaning & processing
• Directed and/or independent research to test scientific hypotheses
• Engage with diverse research groups to understand their models and products and develop solutions to meet their data needs
• Evaluate the limitations of existing data sources and provide recommendations to address unmet data needs
• Undertake written & verbal communication with stakeholders in various parts of the organization
• Lead a team focused on both integrating existing models and developing new models; work collaboratively with partner teams to maximize the use of genetic, environmental, and grower management data assets
• Actively contribute to efforts to understand the prospective value of R&D projects in ways that can support portfolio review processes and financial forecasting; track and maintain portfolio of projects and capabilities against company pipeline/portfolio processes
• Serve as the primary point of contact and key science stakeholder to respective counterparts in other business units, including Product, Engineering, and Commercial/Marketing
• Contribute thought leadership, helping establish/execute on the team’s research agenda
• Clearly and effectively communicate research vision, strategy, and outcomes to key stakeholders both internally and externally.

Active areas of research:

• Analysis and interpretation of observations (e.g. satellite, weather stations, radar), and third party products (climate indices, reanalyses, seasonal outlooks)
• Ensemble reconstruction of historical weather from multiple proxies
• Multivariate spatio-temporal stochastic processes
• A combination of physical and statistical models, including statistical forecast calibration and downscaling
• Numerical weather prediction, data assimilation, mesoscale meteorology, ensemble forecasting

Basic Qualifications:

• MS in a quantitative science discipline (e.g. atmospheric sciences, physics, applied mathematics) paired with experience in data science or computationally intensive research
• Demonstrated experience working with diverse weather data, including a high level of expertise with soils and other environmental data
• At least 5 years of post-degree work experience, including industry experience involving management of research programs and at least 1 year of people management experience
• Demonstrated experience translating complex technical concepts to collaborators, decision makers, and non-technical audiences

Preferred Qualifications:

• PhD in Atmospheric Sciences, Computer Science, High-Dimensional Statistics, Applied Math
or other physical science involving computationally intensive research

• Strong organizational skills
• Ability and inclination to work in multi-disciplinary environments, and desire to see ideas realized in practice
• Strong drive to learn new topics and skills and to develop innovative products for our customers
• Excellent interpersonal and communication skills

What We Offer:
Our teams are composed of industry experts, top scientists, and talented engineers. The environment is extremely engaging and fast-paced, with dozens of specialties coming together to provide the best possible products and experiences for our customers. We provide competitive salaries and some of the best perks in the industry, including:

• Superb medical, dental, vision, life, disability benefits, and a 401k matching program
• A stocked kitchen with a large assortment of snacks & drinks to get you through the day
• Encouragement to get out of the office and into the field with agents and farmers to see firsthand how our products are being used
• We take part and offer various workshops, conferences, meet-up groups, tech-talks, and hackathons to encourage participation and growth in both community involvement and career development

We also hinge our cultural DNA on these five values:
• Inspire one another
• Innovate in all we do
• Leave a mark on the world
• Find the possible in the impossible
• Be direct and transparent

Job site location: [http://jobs.jobvite.com/the-climate-corporation-internal/job/oUFd9fwF](http://jobs.jobvite.com/the-climate-corporation-internal/job/oUFd9fwF)

CIMMS RESEARCH ASSOCIATE – OPERATIONS PROVING GROUND

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma is currently looking for a Research Associate (RA) to collaborate with scientists and National Weather Service (NWS) forecasters at the Operations Proving Ground (OPG) in Kansas City, MO. This position will assist with projects designed to transition meteorological research and forecasting tools into the operational environment, develop practical applications for emerging technologies, incorporate risk communication skills into the warning and forecast process, and optimize NWS forecast delivery systems. Much of the work will be conducted on the Advanced Weather Interactive Processing System, Version 2 (AWIPS-2). Concentrating on AWIPS-2 enables the OPG to focus development and evaluation efforts on the primary NWS operational system, as well as allowing meteorological research, development and operational services to be integrated and leveraged with other federal, regional, state and local partners

[See attached flyer for complete information]

SEMESTER ABROAD: INTERN – STUDY - TRAVEL

Spend your next semester interning, studying and living in a developing country, gaining career relevant experience while exploring the world as an alternative to volunteer tourism, the Semester in Development prioritizes learning from locals, both in the classroom, where you'll earn university credits, and in the field, during your hands-on internship

The program is open to all undergrads, and at $6,250 USD is a low-cost alternative to a traditional semester spent at home or abroad

Are you looking to gain meaningful experience? Have you considered going abroad but don’t know where to look?

For more than 6 years, Insight has been delivering programs for students in over 7 countries. With a model of ethical engagement at the root of what we do, our programs equip students with the skills and experiences sought after in today's global community.

To Learn More visit: [https://insightglobaleducation.com/university/?utm_campaign=Semester%20in%20Development%20](https://insightglobaleducation.com/university/?utm_campaign=Semester%20in%20Development%20)
UNDERGRADUATE SUMMER RESEARCH OPPORTUNITIES AT THE SCRIPPS INSTITUTION OF OCEANOGRAPHY

The Scripps Institution of Oceanography is offering summer research experience for undergraduates, spanning fields that include earth sciences, geophysics, and atmospheric science. For a list of these internships, go to: https://scripps.ucsd.edu/undergrad/research-programs/summer-research-opportunities.

REQUEST FOR PREPROPOSALS FOR USE OF THE U.S. DEPARTMENT OF ENERGY’S ARM USER FACILITY

The U.S. Department of Energy (DOE) is now accepting preliminary proposals from scientists worldwide to use components of the Atmospheric Radiation Measurement (ARM) user facility for field campaigns. Preproposals are due April 5, 2019, for:

- Use of the second ARM Mobile Facility – AMF2 will be available for deployment beginning in January 2022. Note: The Scanning ARM Cloud Radar (SACR) will not be offered with AMF2.
- Supplemental campaigns – Moderate-size campaign proposals to augment an ARM atmospheric observatory will be considered for calendar years 2020–2021.
- Note: The Gulfstream-159 research aircraft will not be available for this call.

Submit preproposals online through the field campaign preproposal form.

Be sure to check the ARM campaign page for more details, including current campaigns and capabilities, and proposal due dates. Proposed deployments should focus on research that addresses the ARM mission of improving the understanding and representation of clouds and aerosols in earth system models, as well as their interactions and coupling with the Earth’s surface.

Priority will be given to proposals that:

- make comprehensive use of the ARM facilities
- focus on strategic goals of the DOE Office of Biological and Environmental Research (BER)
- have the ability to improve regional or global earth system models.

Proposals that coordinate with other BER community capabilities (e.g., Environmental Molecular Sciences Laboratory, AmeriFlux Network, Next Generation Ecosystem Experiments in the Arctic and Tropics, Energy Exascale Earth System Model) are encouraged.

https://www.arm.gov/news/facility/post/52337

ASSISTANT PROFESSOR OF METEOROLOGY POSITION AT VIRGINIA TECH

The Department of Geography (https://geography.vt.edu) at Virginia Tech (https://vt.edu) is seeking applicants for a faculty position in meteorology/climatology at the level of Assistant Professor. This is a full-time, tenure-track position available August 2019.

We seek a geographically trained meteorologist or climatologist who has demonstrated excellent teaching, is able to teach courses in dynamic and either physical or synoptic meteorology, and who will develop additional courses in support of our BS degree program in Meteorology. Supervision of graduate students in our geography MS degree program and in our College of Natural Resources and Environment’s (https://cnre.vt.edu) interdisciplinary Geospatial and Environmental Analysis PhD program is also expected.

[See flyer attached for complete information]
CIMMS RESEARCH SCIENTIST – WARN ON FORECAST @ UNIVERSITY OF OKLAHOMA

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) is currently seeking an experienced Research Scientist to provide scientific and meteorological expertise for collaborative work to advance NSSL’s storm-scale data assimilation and prediction science within the NOAA Warn-on-Forecast project. Specifically, research will focus on improving short-term predictions of high impact severe convective storms, heavy rainfall, landfalling tropical cyclones and other hazardous weather associated with convective storms. This research will require close collaboration with the Storm Prediction Center, NOAA’s Global Systems Division at the Earth Systems Research Laboratory, and the Environmental Modeling Center in College Park, Maryland. A successful candidate for this position will need high-level abilities to diagnose and understand differences in forecasts between various modeling and data assimilation systems, through expertise in mesoscale and storm-scale dynamics and convection allowing models. Also required are high-level abilities to assess the capabilities of models to properly depict mesoscale convective systems and land-falling tropical cyclones and their attendant hazardous weather, and the ability to develop diagnostics for those weather hazards from convective models. The emphasis of the research will be on Warn-on-Forecast applications (e.g., 0-6 h forecasts of severe wind gusts, storm-scale vortices within mesoscale convective systems, and tornadic supercells within TC rainbands). The position will be based at the National Severe Storms Laboratory (NSSL) in Norman, OK within the National Weather Center, a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations.

[For complete information see attached flyer]

CIMMS – MRMS SEVERE WEATHER RESEARCH SCIENTIST

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and assessment of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will lead the development of severe convective weather guidance applications for the Multi-Radar / Multi-Sensor system, which is widely used in the National Weather Service, private sector, and in academia for analyzing thunderstorm events.

[See attached flyer for complete information]

CIMMS PETER LAMB POSTDOCTORAL FELLOWSHIP

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is seeking excellent candidates for the prestigious Peter Lamb Postdoctoral Fellowship. CIMMS is a research organization that promotes collaborative research between National Oceanic and Atmospheric Administration (NOAA) and University of Oklahoma (OU) scientists on problems of mutual interest to improve basic understanding of mesoscale and storm-scale meteorological phenomena to help produce better forecasts and warnings that save lives and property and to understand the societal impacts of such
phenomena. Research scientists within CIMMS use observations, analysis and models to improve the understanding and prediction of high-impact weather elements and systems and climate anomalies ranging in size from cloud nuclei to multi-state areas.

Although the position is not project-specific, proposals for the CIMMS Postdoctoral fellowship should address at least one of CIMMS’ research themes: 1) weather radar research and development; 2) storm-scale and mesoscale modeling research and development; 3) forecast improvements research and development; 4) impacts of climate change related to extreme weather events; and 5) societal and socioeconomic impacts of high-impact weather systems. The CIMMS website http://cimms.ou.edu/index.php/research has more information on projects underway within these research themes as well as contact information for CIMMS scientists working on these themes. It is suggested but not required that those applying contact a CIMMS scientist before writing their research proposal to receive guidance when drafting a proposal.

[See attached flyer for complete information.]

CIMMS RESEARCH ASSOCIATE – SEVERE CONVECTIVE WEATHER RADAR APPLICATIONS

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma currently is seeking a research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and testing of new severe weather applications for the detection and diagnosis of tornadoes and hail.

[For additional information, see attached flyer]

CIMMS RESEARCH ASSOCIATE – MRMS SEVERE WEATHER APPLICATIONS

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSSL) Warning Research & Development Division on the development of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will work to develop severe convective weather guidance applications for the Multi-Radar / Multi-Sensor project, which is widely used in the National Weather Service, private sector, and in academia for analyzing thunderstorm events.

[See attached flyer for complete information]

LECTURER – UNIVERSITY OF GEORGIA

The University of Georgia, Geography Dept., is advertising for a full-time non-tenure-track lecturer who would teach synoptic, mesoscale, weather forecasting seminars, and physical geography, with a PhD who is interested in, and excels, at teaching weather-related subjects. The salary is circa $60K/9-month appointment. A diverse applicant pool is highly desirable.

Job ad link is here: https://www.ugajobsearch.com/postings/35012?fbclid=IwAR0WH1FI7sqLzyy- iPJPZuhoJc1f3Uq9qYjqL-1fgjiXCOjtkHsjqnM4

UNIVERSITY TRAVEL PROVIDE TO CHANGE TO ANTHONY TRAVEL

Effective April 1, Anthony Travel will be Purdue’s official travel partner University-wide. Anthony Travel has been serving Intercollegiate Athletics for several years and now will serve the business travel needs of all faculty and staff.

Anthony Travel will provide faculty and staff with comprehensive travel management services including air and ground transportation, hotel accommodations, group travel and 24/7 travel assistance, which allows travelers to resolve issues quickly when on the road outside normal business hours.
The University is exploring a new Boiler Travel initiative, and this transition to Anthony Travel is a precursor to the new initiative. More information on the broader program will be shared in the coming weeks.

Faculty and staff are encouraged to use Anthony Travel to book their travel beginning April 1. Review the following information about the transition and the new provider:

- Departments will not be charged transaction booking fees with Anthony Travel.
- Effective April 1, University business travelers may book with Anthony Travel in one of the following ways:
  - Call 765-496-TRIP (765-496-8747) during standard business hours or afterhours.
  - Email boilertravel@anthonytravel.com
- Anthony Travel agents will be able to view and assist with travel reservations made through Altour before April 1; however, faculty and staff are encouraged to wait to book future travel until April 1 if possible to help ease the transition between providers.
- Effects of the agency transition on Concur
  - Booking through Concur will not be available beginning 9 a.m. Monday (March 25) for approximately two days. Expense reports may still be entered during this time. A notice will appear in Concur when booking is once again available.
  - Itineraries established before April 1 will not be viewable in the traveler’s trip library. If the traveler or travel arranger needs a copy of an existing itinerary, they must save or print before 9 a.m. Monday. After that date, existing itineraries must be obtained from the airlines.

For more information, email boilertravel@purdue.edu or call 765-496-TRIP (765-496-8747).

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**ENTERPRISE AND THE ENVIRONMENT SUMMER SCHOOL**

The Enterprise and the Environment Summer School will take place from 30 June - 12 July 2019 at the University of Oxford and is intended for undergraduate and masters students passionate about environmental change. The course typically attracts a global spread of 35-40 attendees from a diverse mix of academic disciplines and will include teaching across subjects such as sustainable enterprise management, environmental economics and policy, the future of transport, valuing water for sustainable development, and the renewable energy transition. More details are available on the website: https://www.smithschool.ox.ac.uk/courses/summer-school/

[See attached flyer for more information]
IMPORTANT NOTICE ABOUT THIS NEWSLETTER

This newsletter is used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Individual email announcements will no longer be sent unless the content is time-sensitive. We will continue to include our publications, presentations and other recent news items as well.

Those using paper copies of the newsletter should go to our newsletter archive on the EAPS website at http://www.eaps.purdue.edu/news/newsletters.html and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Katherine Huseman (khuseman@purdue.edu) by 5:00pm on Thursday of each week for inclusion in the Monday issue.

If it is in the newsletter, we assume you know about it and no other reminders are needed. For answers to common technology questions and the latest updates from the EAPS Technology Support staff, please visit: http://www.eaps.purdue.edu/resources/information_technology/index.htm.

Also, as an additional resource for information about departmental events, seminars, etc., see our departmental calendar at http://www.EAPS.purdue.edu/events-calendar.html.
Abstract: This talk analyzes ethical theories that claim to produce umbrella terms for conceptualizing wrongs done to people in their capacity as knowers (Fricker, 2009) from a decolonial perspective. Using the case of Latin American indigenous women's testimonies in the Recovery of Historical Memory Project and transitional justice commissions, I identify critical problems with mainstream accounts of so-called 'testimonial' and 'hermeneutic' injustice. I argue these problems are rooted in tacit cultural biases and prejudices in the interpretive frameworks that inform accounts of epistemic injustice, and in fact redouble the invisibility of hermeneutic forms of gender-based violence in Latin America. I refocus attention on the work of Indigenous theorists who discuss epistemic injustice from an embodied and historically situated perspective.
SCHWARZMAN SCHOLARS

THU - MARCH 28

5:30 PM  Schwarzman Scholars  HCRN 1143
Schwarzman representative Christian Tanja will speak to students about this leadership program for a 1-year Master’s in Global Affairs at Tsinghua University in China. Open to U.S. and international students from any major.

6:30 PM  Knight-Hennessy Scholars  HCRN 1143
Students with demonstrated leadership and civic commitment receive full funding for graduate education at Stanford.

WWW.PURDUE.EDU/NISO
2019 College of Science Graduate Student International Travel Awards

Application Submission Deadline: 4:00 PM May 31, 2019

For travel between July 1, 2019 and December 31, 2019

~ 2 or 3 awards ranging up to $800 for international travel will be awarded

Prerequisites:
• must be a full-time PhD student within the Department in the College of Science
• must be making an oral or poster presentation at an international conference

Priority will be given to:
• travel to make an oral presentation at a conference
• attendance at an interdisciplinary conference
• students who have passed their prelims

To apply, please send electronically as one file:
• CV (2 page limit)
• brief summary of research (1 page limit)
• brief statement of purpose for attending conference specifying whether your presentation is oral or poster
• provide web link to conference
• letter of support from research advisor

Send applications to Robin Sipes at rsipes@purdue.edu
The Office of Undergraduate Research (OUR) continues the research scholarship program to recognize undergraduate student engagement in original research, scholarship, or creative work under the guidance of a Purdue faculty or approved mentor. These annual, non-renewable, academic scholarships, in the amount of $1,000 ($500 per semester) and disbursed through the Division of Financial Aid, are funded through an equal matching agreement between the OUR and each of the participating Colleges and Schools.

OUR Scholars are full-time undergraduate researchers who excel in their programs. OUR Scholars are determined for a full academic year and must meet certain program requirements, such as presenting at the annual Undergraduate Research Conference or "Celebrate..." events and attending professional development seminars.

Sponsoring Academic Units:
College of Agriculture · College of Education · College of Engineering · College of Health & Human Sciences · College of Liberal Arts · College of Pharmacy · College of Science · Honors College · Krannert School of Management · Purdue Polytechnic Institute · Purdue Libraries

2018-19 OUR SCHOLARS UNDERGRADUATE RESEARCH LEARNING CONTRACT

2019-20 OUR Scholars Applications Due March 27, 2019

STUDENT APPLICATION LINK :: RESEARCH MENTOR LINK FOR RECOMMENDATION

OUR Scholar Application Process - Note: Both student application and research mentor recommendation are required by the deadline.

- Student Application: Includes student information and project information (background, objectives, approach, and results)
- Research Mentor Recommendation: A letter of recommendation using the above Qualtrics link or the one emailed to them after the student completes their application

OUR Scholar Qualifications

- Full-time student (minimum of 12 credit hours) in good academic standing at the West Lafayette campus - includes PharmD students who have not been awarded a bachelor's degree - for the entire 2018-19 academic year.
- Preference is given to students with a cumulative GPA of 2.75 or above.
- Work on the same, year-long project for two academic semesters (Fall 2019 and Spring 2020).
- Students with multiple majors, including the Honors College, shall select a single college or school to review their application.
- Purdue Polytechnic Institute projects: Proposed research projects from students in the Polytechnic Institute must align with one or more of the Polytechnic research impact areas: Realizing the Digital Enterprise, Healthy and Sustainable Communities, Future Work and Learning, Cybersecurity and Critical Infrastructure, Community and Civic Engagement. Descriptions for each can be found on the Polytechnic research office website. Faculty support letters must describe how proposed projects are in alignment with one or more research impact areas.
- Previous OUR Scholar recipients are not eligible.

OUR Scholars Expectations
• Enroll and pass a one-credit undergraduate research [online course] for each semester as an OUR Scholar - most will enroll in GS 29501 and GS 39501, but previous enrollment status in these courses may alter the actual course
• Disseminate research at the [Purdue Undergraduate Research Conference] in the spring or the [Celebrate Purdue's Thinkers, Creators, and Experimenters] showcase in the spring, if available
• Submit two end-of-the-semester reports of their undergraduate research experience as an online course assignments

The announcement of scholarships will be provided to selected students by May 2019.
CIMMS Research Associate
Warn-on-Forecast for Hazards Associated with Landfalling Tropical Cyclones

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) seeks to fill a Research Associate position for its collaborative research with the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory (NSSL) at the National Weather Center (NWC) in Norman, Oklahoma. The incumbent will contribute to NSSL’s Warn-on-Forecast (WoF) research and development program in predicting hazards associated with landfalling tropical cyclones. The incumbent will work in close collaboration with the researchers at NOAA’s Atlantic Oceanographic and Meteorological Laboratory (AOML) Hurricane Research Division (HRD) in Miami, Florida. The dynamic research and operational working environment at the NWC and HRD will provide the candidate with ample opportunities for career advancement. The position will be located in Norman, OK.

Background:
The National Weather Service issues outlooks for landfalling hurricane hazards, followed by mesoscale discussions and watches 1–12 h in advance of landfall. The National Hurricane Center, Weather Prediction Center, Storm Prediction Center, local Weather Forecast Offices and River Forecast Centers issue outlooks, watches, and warnings for extreme rainfall and flash floods, tornadoes and hurricane force winds. However, forecasting these hazards associated with landfalling hurricanes are very challenging. Probabilistic model guidance for these hazards can be advanced through the creation of and improvements to convection-resolving numerical weather prediction ensemble system.

Essential job functions include:
- Advance data assimilation and ensemble forecasts for hazards associated with landfalling tropical cyclones, including extreme rainfall, tornadoes and wind gusts.
- Investigate the impact of different observations on these forecasts.
- Create probabilistic guidance from ensemble output to efficiently communicate hazards.
- Contribute to publish results in progress reports and peer reviewed literature.
- Present research results at meetings and conferences.

Desired Qualifications:
The incumbent must have a Master’s Degree in Atmospheric Science or an equivalent having performed research in the area of tropical cyclones. The incumbent must demonstrate skill in data analysis and must have previous experience with numerical weather prediction models and/or data assimilation. Experience working with large datasets and strong programming (e.g., Fortran, C, C++), and scripting (e.g. Python, NCL) skills are desirable. We encourage motivated individuals with excellent written and verbal communication skills. The incumbent must be an easy relationship builder, creative, intelligent, and a flexible, supportive team member.
Start date for the position will be as soon as the candidate can begin work. The position will remain open until filled. Salary will be competitive depending on experience and qualification with University of Oklahoma benefits. Information on benefits may be found at http://hr.ou.edu/. This is a two year funded project. Continuation of appointment for the second year will be based on performance.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke  
Executive Director, Finance and Operations  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
treinke@ou.edu  
REFERENCE: WoF-LTC

The University of Oklahoma is an equal opportunity/Affirmative Action employer.
UCAR NEXT GENERATION FELLOWSHIPS

Each year the University Corporation for Atmospheric Research (UCAR) selects three graduate students from underrepresented communities for fellowships tracks in Earth System Science, Diversity & Inclusion, and Public Policy.

These fellowships offer graduate students the opportunity to learn alongside leaders in their fields. Just as important, these programs bring an infusion of fresh ideas and new perspectives to our organization. Each two-year award provides financial support for graduate school and two summer internships.

THE UCAR NEXT GENERATION FELLOWSHIPS ARE INTENDED FOR GRADUATE STUDENTS:
- attending a North American university
- from underrepresented populations
- holding an undergraduate degree in atmospheric science or a related Earth system science, such as one of the other geosciences, chemistry, computer science, engineering, environmental science, mathematics, meteorology, oceanography, physics, or social science

FOR MORE INFORMATION AND TO APPLY, PLEASE VISIT https://www.ucar.edu/opportunities/fellowships

These awards are for two school years and two summer internships.

Fellows receive $20,000 per school year, plus support during the summer internships.

Submission Deadline is June 3, 2019

Awards to be announced August 1, 2019
Geodata Science for Professionals
Master’s Program

College of Science: Department of Earth, Atmospheric, and Planetary Sciences

Add to the Employment Value of Undergraduate Education:

- Get a Master of Science
- Work with state-of-the-art High Performance Computing environment for Big Data analytics
- Acquire applied research experience
- Personalized guidance to choose among various elective courses and small group immersion courses providing enrichment to career plans
- Earn one or more Graduate Certificates: Computational Science and Engineering, Applied Statistics, Geodata Analytics.

Contact for Information
Phone: +1 (765) 494-3258
Email: eaps-info@purdue.edu

www.eaps.purdue.edu/gdsp

Department of Earth, Atmospheric, and Planetary Sciences, Purdue University
550 Stadium Mall Drive
West Lafayette, IN 47907
United States of America
About the GDSP Program

Employers seek in today’s advanced Science, Technology, Engineering, and Mathematics workforce skills in analytics and data science, including Big Data (Denecke, D. et al. 2017, Council of Graduate Schools). In the United States, however, geoscience curricula are in general not designed to capitalize on the digital revolution, especially the enormous growth in data science. Thus, there has been a disconnect between the jobs of the future and the curricula of the present.

Data science is highly technical and requires rigorous preparation in mathematics, statistics and computing. Specifically, in the context of geosciences, data science applied with the goal of improving the understanding of causal relations in physical systems also promotes better predictions, therefore risk assessments.

In response to the Purdue campus-wide data-science initiatives and the College of Science strategic plan, the Department of Earth, Atmospheric, and Planetary Sciences (EAPS) is prioritizing data science training, with applications to climate, weather forecasting, environmental science, natural resources, and energy data for decision-support and decision-making in the public and private sectors.

A key outgrowth of this initiative is the EAPS Master’s Concentration of Geodata Science for Professionals (GDSP), integrating rigorous academic coursework, high-performance big data-science computing environments such as Hadoop systems and GPU computing, with real-life research and work experiences.

To apply, please visit https://www.purdue.edu/gradschool/admissions/how-to-apply/index.html

Curriculum 31 total required credits

Geodata-science Core Courses
Take at least two (6 credits)
- Introduction to Analysis and Computing with Geoscience Data
- Time Series Analysis for Geosciences
- Geodata Science
- Geophysical Inverse Theory

Foundational Core Courses
Take at least three (9 credits), For example:
- Theory of Climate
- Radar Meteorology
- Ecosystem Ecology
- Introduction to Geodesy
- Introduction to Seismology
- Geographic Information Systems

Applied Geodata Courses
Take at least two (6 credits), For example:
- Forecast Verification
- Extreme Weather and Climate: Science and Risk
- Geodetic Data and Applications
- 3D Seismic Interpretation and Visualization
- Introduction to Reflection Seismology
- Geospatial Modeling and Analysis

Computational and Statistical Courses
Take at least two (6 credits), For example:
- Introduction to Computational Science
- Scientific Visualization
- Digital Signal Processing
- Statistical Methods
- Applied Regression Analysis
- Divide and Recombine with DeltaRho for Big Data & High Computational Complexity

Internship/Applied Research Experience (3 credits)

Geodata Science Seminar Oral Presentation (1 credit)

Gain Professional Data-Science Skills, for Example:
- Remote sensing and GIS data analytics
- Weather and climate risk assessments
- Data-driven environmental hazard mitigation
- Seismic inversion and imaging
- Machine learning in seismology

Earn a Master of Science Degree

Apply
- Fall application due by March 15
- Spring application due by October 15 of the previous year

Format
- Full-time or part-time on campus
- 31 total required credit hours

Length
- Full-time students can often finish in three semesters
- Maximum four years

Fees
- Matching the Purdue standard Graduate/Professional tuition

For complete course list, please visit www.eaps.purdue.edu/gdsp/requirements.html
2019 SUMMER INTENSIVE ON
COMMUNITY ENGAGED SCHOLARSHIP

June 3-7, 2019 | On the campus of Michigan State University

ATTENTION: EARLY CAREER FACULTY AND ADVANCED GRADUATE STUDENTS

Michigan State University’s Office of University Outreach and Engagement is hosting a Summer Intensive that will focus on community-engaged research and community engaged teaching and learning, including service-learning and community-based research in classes.

The Summer Intensive is composed of interactive workshops, lunches in disciplinary clusters and with senior community-engaged scholars, dialogue with community partners, and time to develop your own community engagement plan for your return to campus.

At the end of four days, you’ll come away with:
• Conceptual frameworks and scholarly resources
• Practical partnership, collaboration, and evaluation tools
• Perspectives from community partners
• Career advice from senior community-engaged scholars
• Strategies for publishing community-engaged scholarship
• Support from a network of interdisciplinary colleagues

Application Deadline:
Friday, April 5, 2019
Applications include the online form, short biography, statement of interest, nomination forms, and release form.

Registration Fee:
$450 for MSU participants
$550 for non-MSU participants
Registration fee includes 4 breakfasts, 4 lunches, 1 reception, field trip, and all teaching/learning materials.

ENROLLMENT IS LIMITED TO 35, SO REGISTER SOON.

For more information and registration: engage.msu.edu/summerintensive

DR. DIANE M. DOBERNECK, ASSOCIATE DIRECTOR, MSU’S NATIONAL COLLABORATIVE FOR THE STUDY OF UNIVERSITY ENGAGEMENT: msu.ces.summer.intensive@gmail.com
PhD position in atmospheric modelling over complex terrain

The Atmospheric Dynamics group of the Department of Atmospheric and Cryospheric Sciences (ACINN) at the University of Innsbruck (Austria) invites applications for a PhD position in the field of mountain meteorology.

The PhD student will work in the project “Atmospheric boundary-layer modeling over complex terrain (ASTER)”, led by principal investigator Dr. Manuela Lehner. The objectives of the project are (i) to evaluate the performance of a numerical weather prediction model in forecasting soil properties and surface and near-surface turbulent fluxes over complex terrain and (ii) to evaluate the model's sensitivity to changes and potential errors in the turbulence and land surface parameterizations and their input parameters over complex terrain. Numerical weather prediction relies heavily on these parameterizations to represent the exchange of heat, moisture, and momentum between the ground and the atmosphere and within the atmospheric boundary layer at spatial scales that are not resolved explicitly by the model. Current parameterizations, however, are not necessarily adequate for complex mountainous terrain and the spatial resolution of required land cover datasets is often not sufficient to represent the land use correctly. The PhD student will focus on the first of the above objectives by performing case study simulations for the regions of North and South Tyrol with WRF and quantifying the model performance based on observational data.

The project is funded by the Euregio Fund for Scientific Research and is a collaboration between the University of Innsbruck, the University of Trento, and the Free University of Bolzano and is embedded in the recently launched international TEAMx initiative (multi-scale transport and exchange processes in the atmosphere over mountains – programme and experiment). The PhD student will work closely with the other project partners and with the members of the atmospheric dynamics research group at ACINN led by Prof. Mathias Rotach (http://acinn.uibk.ac.at/research/dynamics).

The position is initially awarded for one year and will be extended to a total duration of 3 years after positive evaluation. The preferred starting date is 1 July 2019. Remuneration will be based on the Austrian collective agreement for university employees (representative figures are provided by the Austrian Science Fund, https://www.fwf.ac.at/en/research-funding/personnel-costs/).

Essential qualifications: Master (or equivalent) degree in Meteorology/Atmospheric Sciences or a related subject; demonstrated proficiency in Python, Matlab, or a similar programming language; experience with Linux/UNIX environments; excellent oral and written communication skills in English; strong motivation; ability to work independently.

Assets: Knowledge of the atmospheric boundary layer and of mountain meteorology; experience with numerical weather prediction codes; experience with high-performance computing; knowledge of the German language is beneficial but not required.

Applications received before Monday, 25 February 2019, will be given full consideration. The application package should be submitted via e-mail to Manuela Lehner (manuela.lehner@uibk.ac.at) and should include the following information:

- A curriculum vitae;
- A formal letter of motivation, stating your interest and qualifications for the position;
- Degree transcripts and master thesis abstract;
- Contact information for one to three referees.

The University of Innsbruck aims at increasing the proportion of women at all employment levels, and therefore encourages applications by qualified women.

Candidates who wish to receive further details about the position are welcome to contact Dr. Lehner by e-mail.
The Office of Interdisciplinary Graduate Programs Presents the

2019 Spring Reception

Wednesday, May 1, 2019
10:00 AM - 12:00 PM
North & South Ballrooms, Purdue Memorial Union

10:00-11:30 Open Poster Sessions
11:30-12:00 Awards Presentation and Keynote Address
All are welcome to attend

Find more information online.
Submit an application to present a poster.

Contact us at 494-0379 or oigp@purdue.edu
purdue.edu/gradschool/oigp
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma is currently looking for a Research Associate (RA) to collaborate with scientists and National Weather Service (NWS) forecasters at the Operations Proving Ground (OPG) in Kansas City, MO. This position will assist with projects designed to transition meteorological research and forecasting tools into the operational environment, develop practical applications for emerging technologies, incorporate risk communication skills into the warning and forecast process, and optimize NWS forecast delivery systems. Much of the work will be conducted on the Advanced Weather Interactive Processing System, Version 2 (AWIPS-2). Concentrating on AWIPS-2 enables the OPG to focus development and evaluation efforts on the primary NWS operational system, as well as allowing meteorological research, development and operational services to be integrated and leveraged with other federal, regional, state and local partners.

The duties of this position are:
1. Develop expertise in meteorology and the delivery of warnings, forecasts, and impact-based decision support services (IDSS).
2. Develop expertise in utilizing AWIPS-2 to generate and disseminate forecast products and deliver IDSS.
3. Develop expertise in creating AWIPS-2 cases that can be used to evaluate and validate the usefulness and usability of promising tools or capabilities emerging from NOAA-affiliated laboratories and testbeds.
4. Refine skills needed in the operation of Linux and Windows workstations. The person applying to this position should have a basic knowledge of Linux and experience with Python.
5. Participate in NWS designed simulations to study the effectiveness of newly developed applications and capabilities designed to enhance forecasting and/or service delivery.
6. Assist in testing and fielding new capabilities and services in a simulated operational environment. By validating both scientific integrity and human factors, deployment risks will be reduced prior to implementation.
7. Review technical and professional publications, and attend seminars to stay abreast of current developments in meteorological and hydrological applications.
8. Attend meetings and professional conferences to understand new meteorological and hydrological applications and interact with the operational community.
9. Perform related duties as assigned to support the development and delivery of user and focal point training for the AWIPS-2 system.

The minimum qualifications for the position are:
1. A Master’s Degree in Meteorology, Atmospheric Science or related area;
2. Or a Bachelor’s Degree in Meteorology, Atmospheric Science or related area and at least three years’ experience in operational meteorology, operational hydrology or applied research;
3. Emphasis will be placed on applicants with experience in operational forecast operations, operational forecast systems, applied meteorology, Linux, Python, and AWIPS-2.
Applicants should identify expertise with any of the following areas: operational forecasting, forecast systems, risk communication and adult education. Strong oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems, National Weather Service systems, programming skills and commercial software applications - specifically Python, GIS, Java, Dreamweaver, and graphic design programs.

Normal working hours will be observed except for occasional irregular hours during system testing or workshops. Incumbents will receive training and gain expertise in the latest meteorological forecasting systems. This position is located in Kansas City, MO.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff and OPG management. The incumbent will work under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams.

Beginning salary range is scalable to experience and qualifications, supplemented by University of Oklahoma employment benefits. Information on benefits may be found at https://hr.ou.edu/.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke  
Executive Director, Finance and Operations  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
treinke@ou.edu  
ATTN: OPG KC

*The University of Oklahoma is an equal opportunity/Affirmative Action employer.*
Spend your next semester interning, studying and living in a developing country, gaining career relevant experience while exploring the world.

As an alternative to volunteer tourism, the Semester in Development prioritizes learning from locals, both in the classroom, where you’ll earn university credits, and in the field, during your hands-on internship.

The program is open to all undergrads, and at $6,250 USD is a
Are you looking to gain meaningful experience? Have you considered going abroad but don't know where to look?

For more than 6 years, Insight has been delivering programs for students in over 7 countries. With a model of ethical engagement
at the root of what we do, our programs equip students with the skills and experiences sought after in today's global community
Full-time, Tenure-track Assistant Professor Position in Meteorology/Climatology
Department of Geography, Virginia Tech, Blacksburg, Virginia

The Department of Geography (https://geography.vt.edu) at Virginia Tech (https://vt.edu) is seeking applicants for a faculty position in meteorology/climatology at the level of Assistant Professor. This is a full-time, tenure-track position available August 2019.

We seek a geographically trained meteorologist or climatologist who has demonstrated excellent teaching, is able to teach courses in dynamic and either physical or synoptic meteorology, and who will develop additional courses in support of our BS degree program in Meteorology. Supervision of graduate students in our geography MS degree program and in our College of Natural Resources and Environment's (https://cnre.vt.edu) interdisciplinary Geospatial and Environmental Analysis PhD program is also expected.

An ability to develop a strong, externally funded research program and publication record is essential for success at Virginia Tech. Applicants must provide evidence of the skills necessary to secure external funding and evidence of a research track focused on atmospheric science with a strong foundation in data analytics. The specific research specialty is open, but preference will be given to candidates who can strengthen research collaborations at Virginia Tech through research involving data-driven modeling and/or analysis of large/complex data sets.

In the spirit of Virginia Tech’s strong commitment to the principles of diversity and inclusion, the Department of Geography seeks a broad spectrum of candidates, including women, minorities, veterans, and people with disabilities. Individuals with disabilities desiring adjustments in the application process should notify the search committee chair by the application deadline. To evaluate the requirements and apply, candidates should review posting TR0180193 in its entirety at https://listings.jobs.vt.edu/postings/search.

Review of applications will begin on January 18, 2019. For full consideration, applicants MUST apply on-line.

Applications should include the following information: (1) curriculum vitae, (2) a cover letter expressing a statement of interest in the position, (3) separate statements of research and teaching interests in a single statement document, and (4) the names, titles, and complete contact information for three references. An official transcript for highest degree earned is required prior to the start of employment for the selected candidate.

Inquiries can be made to Dr. Drew Ellis, Search Committee Chair; e-mail: awellis@vt.edu.

The Department of Geography offers bachelor’s and master’s programs in geography, houses the only bachelor’s degree in meteorology in the state, and is also a major participant in the interdisciplinary geospatial and environmental analysis doctoral program. The department is recognized for its high quality of instruction and advising and is a leader at Virginia Tech in geospatial applications. Faculty regularly publish with graduate students and are active on multiple research projects supported by external funding sources. Selected faculty research topics include human health in Appalachia, Tanzanian social networks, Bangladesh coastal hazards, sea level rise in the southeast US, alpine biogeographic response to climate change, Caribbean paleo-environments, water resources in South Asia, spatial analysis of tropical cyclones, urban mega-events (e.g., the Olympics), and remote sensing of land use change.
This year, faculty members have taught international field courses in Antarctica, Croatia, and New Zealand, and the meteorology program regularly offers a two-week summer Hokie Stormchase course. The department is well-positioned in the new Pathways general education curriculum with multiple Pathways courses and a new minor in Sustainability.

The College of Natural Resources and Environment, one of nine college units at Virginia Tech, was established in 1992. The college is composed of four academic departments (Fish and Wildlife Conservation, Forest Resources and Environmental Conservation, Geography, and Sustainable Biomaterials) serving more than 1,000 undergraduate students. The college has about 180 faculty and staff, including 75 tenure-track faculty. More than 300 graduate students are enrolled in our programs, which include both an online master of natural resources degree and a cohort-based executive degree in the National Capital Region. The college’s Advising Center, with dedicated professional academic advisors assigned to each department, works in partnership with faculty mentors focused on student success. The college hosts an annual career fair that attracts a wide range of external partners, working in partnership with the college’s director of employer relations. Faculty research awards total $15-20 million annually in the college’s research-intensive, student-centered environment. Two of our departments are among the top 10 academic departments at Virginia Tech in average research dollars awarded annually, and the college ranks second among colleges at Virginia Tech in research expenditures per FTE. The college hosts several NSF centers as well as numerous other research and outreach centers engaged with state and federal agencies and the private sector. The college manages a nearly 1,300-acre forest located close to campus that is utilized on a weekly basis for student learning and research, as well as a forestry research site in Critz, Virginia. College Factual has ranked the college as No. 1 for the study of natural resources and conservation for four consecutive years. The forestry degree program is ranked No. 1 by College Factual for the second consecutive year, and the packaging systems and design degree program is ranked No. 7 among the top 20 programs nationally by Value Colleges.

*Virginia Tech is an equal opportunity/affirmative action institution.*
CIMMS Research Scientist – Warn-on-Forecast

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) is currently seeking an experienced Research Scientist to provide scientific and meteorological expertise for collaborative work to advance NSSL’s storm-scale data assimilation and prediction science within the NOAA Warn-on-Forecast project. Specifically, research will focus on improving short-term predictions of high impact severe convective storms, heavy rainfall, landfalling tropical cyclones and other hazardous weather associated with convective storms. This research will require close collaboration with the Storm Prediction Center, NOAA’s Global Systems Division at the Earth Systems Research Laboratory, and the Environmental Modeling Center in College Park, Maryland. A successful candidate for this position will need high-level abilities to diagnose and understand differences in forecasts between various modeling and data assimilation systems, through expertise in mesoscale and storm-scale dynamics and convection allowing models. Also required are high-level abilities to assess the capabilities of models to properly depict mesoscale convective systems and land-falling tropical cyclones and their attendant hazardous weather, and the ability to develop diagnostics for those weather hazards from convective models. The emphasis of the research will be on Warn-on-Forecast applications (e.g., 0-6 h forecasts of severe wind gusts, storm-scale vortices within mesoscale convective systems, and tornadic supercells within TC rainbands). The position will be based at the National Severe Storms Laboratory (NSSL) in Norman, OK within the National Weather Center, a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations.

The principal duties of this position are:

1. Conduct original research and solicit funding for new research on diagnostics, verification, and predictability for frequently updating storm scale data assimilation and prediction systems with a focus on understanding model dynamics and representation of physical processes associated with extreme high impact weather.
2. Collaborate with NOAA testbeds such as the Hazardous Weather Testbed, Hydro-Meteorological Testbed, and Aviation Weather Testbed, to design real-time forecasting experiments using experimental storm-scale modeling and data assimilation systems, and lead/organize post-experiment evaluations.
3. Contribute to scientific publications and attend off-site conferences, workshops, symposia and NOAA testbed-related outreach events as needed.
4. Provide leadership within CIMMS and the Forecast Research and Development Division of NSSL through mentorship of students and junior colleagues.

The minimum qualifications for the position are:

1. A PhD in Meteorology, Atmospheric Science, or related area.
2. Demonstrated excellence in mesoscale and convective-scale dynamics via his/her publication record and conference presentations.
3. Experience with mentoring students and/or colleagues in these areas.

Excellent oral and written communication and public speaking skills are highly desired, as well as proficiencies in weather visualization software (e.g., GrADS, NCL, GEMPAK, etc.) and coding languages like Python and/or Fortran. Applicants should identify experience in graphic
design/visualization, programming and scripting languages, as well as skills using numerical weather prediction models.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. CIMMS staff will provide general supervision with technical oversight provided by NSSL staff and management. The incumbent works under general supervision, but is expected to work independently and determine action to be taken in handling all but unusual situations.

The beginning salary is commensurate with educational background and experience, with OU benefits. Information on OU benefits can be found at http://www.hr.ou.edu/.

To apply for the position, please forward your resume, cover letter and list of three references to:

    Tracy Reinke, Executive Director, Finance and Operations
    University of Oklahoma CIMMS
    120 David L. Boren Blvd., Suite 2100
    Norman, OK 73072-7304
    treinke@ou.edu
    Attn: Warn-on-Forecast

The University of Oklahoma is an Equal Opportunity/Affirmative Action employer.
CIMMS Post-Doctoral Research Associate - FACETs

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a postdoctoral research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development of probabilistic severe convective weather guidance for the Forecasting A Continuum of Environmental Threats (FACETs) project. The goal of FACETs is that future warnings will be probabilistic, spatially coherent forecasts.

The duties of this position are:

1. Apply diverse data sets to produce storm-based probabilistic trends and historical distributions of convective storm features to produce probabilistic hazard information.
2. Develop and test new multi-sensor (e.g., satellite, lightning, numerical models, radar) algorithms and techniques (e.g., machine learning) for short-term probabilistic prediction and nowcasting;
3. Acquire and apply expertise in severe local storms and the warning-decision-making process;
4. Design and lead applied research and operational experiments with National Weather Service Forecasters and end-users in the Hazardous Weather Testbed’s Experimental Warning Program.
5. Attend meetings and professional conferences to present research results and interact with collaborators and users; formally publish results when appropriate;
6. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science.

The minimum qualifications for the position are:

1. A Ph.D. Degree in Meteorology, Atmospheric Science, or related area;
2. Experience with scientific programming on UNIX/Linux using a high level language (e.g. C++, Java, Python)
3. Experience with statistical methods or software for meteorological data analysis and visualization
4. Ability to communicate scientific research through conference presentations, formal publications and technical documents

Applicants should identify expertise with any of the following areas: Severe Local Storms; Using Large Datasets; Data Mining; Machine Learning; Statistics; Warning Decision Making; Weather Radar; Lightning Data; Numerical Modeling; Remote Sensing and Satellite. Strong oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems, programming skills (including web-based and mobile applications) and Geographic Information Systems.
Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Works under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams and supervise students.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304

treinke@ou.edu
ATTN: Post-Doc FACETs

The University of Oklahoma is an equal opportunity/Affirmative Action employer.
CIMMS - MRMS Severe Weather Research Scientist

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and assessment of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will lead the development of severe convective weather guidance applications for the Multi-Radar / Multi-Sensor system, which is widely used in the National Weather Service, private sector, and in academia for analyzing thunderstorm events.

The duties of this position are:
1. Lead development and assessment of techniques and algorithms that utilize a variety of sensors (e.g., satellite, lightning, polarimetric radar, or numerical models) to improve the short-term prediction of high impact weather including tornadoes, hail, lightning, and damaging wind.
2. Design and lead applied research and operational experiments in the Hazardous Weather Testbed’s Experimental Warning Program that facilitate the evolution of how severe convective weather threats are analyzed and communicated;
3. Develop scientific talent and enhance diversity within the field through the advisement of undergraduate and graduate students.
4. Attend meetings and professional conferences to present research results and interact with collaborators and users; formally publish results when appropriate;
5. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science.

The minimum qualifications for the position are:
1. A Ph.D. Degree in Meteorology, Atmospheric Science, or related area;
2. Experience with statistical methods or software for meteorological data analysis and visualization
3. Experience with scientific programming on UNIX/Linux using a high level language (e.g. C++, Java, Python)
4. Interest in new severe and convective applied research and operational applications of research
5. Ability to communicate scientific research through conference presentations, formal publications and technical documents

Applicants should identify expertise with any of the following areas: Severe Local Storms; Machine Learning; Statistics; Warning Decision Making; Weather Radar; Lightning Data; Numerical Modeling; Remote Sensing and Satellite. Strong oral and written communication skills
are needed for the position, including the ability to collaborate on proposals and reports. Please indicate experience with Linux (or UNIX) operating systems, programming skills (including web-based and mobile applications) and Geographic Information Systems.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Works under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams and supervise students.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
ATTN: MRMS Scientist

_The University of Oklahoma is an equal opportunity/Affirmative Action employer._
CIMMS Peter Lamb Postdoctoral Fellowship

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is seeking excellent candidates for the prestigious Peter Lamb Postdoctoral Fellowship. CIMMS is a research organization that promotes collaborative research between National Oceanic and Atmospheric Administration (NOAA) and University of Oklahoma (OU) scientists on problems of mutual interest to improve basic understanding of mesoscale and storm-scale meteorological phenomena to help produce better forecasts and warnings that save lives and property and to understand the societal impacts of such phenomena. Research scientists within CIMMS use observations, analysis and models to improve the understanding and prediction of high-impact weather elements and systems and climate anomalies ranging in size from cloud nuclei to multi-state areas.

Although the position is not project-specific, proposals for the CIMMS Postdoctoral fellowship should address at least one of CIMMS’ research themes: 1) weather radar research and development; 2) storm-scale and mesoscale modeling research and development; 3) forecast improvements research and development; 4) impacts of climate change related to extreme weather events; and 5) societal and socioeconomic impacts of high-impact weather systems. The CIMMS website http://cimms.ou.edu/index.php/research has more information on projects underway within these research themes as well as contact information for CIMMS scientists working on these themes. It is suggested but not required that those applying contact a CIMMS scientist before writing their research proposal to receive guidance when drafting a proposal.

Terms of appointment are for one (1) year, renewable for a second year subject to satisfactory performance. An annual salary of $60,000 and a research budget of up to $5,000 per year is included in the award, along with a modest relocation stipend. Successful applicants must have obtained a Ph.D. within the last five years; proof of a Ph.D. is required before assuming the post-doctoral position, but those in the final stages of Ph.D. dissertation completion are encouraged to apply provided a finish date before July 31, 2019 is anticipated.

Applicants are asked to submit electronically: (1) a curriculum vitae; (2) a list of all products (e.g., papers, patents, technology transfers, licensed software, etc.) generated over the course of their career; (3) a cover letter which includes the expected start date and any non-standard resources that might be needed to complete the proposed work; (4) a brief proposal (no more than 4 pages, double-spaced, excluding the list of references and figures) describing the work to be pursued during a 2-year tenure at CIMMS; and (5) a list of three references. In addition, applicants should request that their referees directly send their reference letters to CIMMS at the email address listed below.

To receive full consideration, applications and supporting material should be received prior to January 30, 2019. All materials should be sent electronically to:

Tracy Reinke, Executive Director Finance and Operations
Cooperative Institute for Mesoscale Meteorological Studies (CIMMS)
120 David L. Boren Blvd, Norman, OK, 73072
treinke@ou.edu
ATTN: Peter Lamb Postdoctoral Fellowship
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will work to develop severe convective weather guidance applications for the Multi-Radar / Multi-Sensor project, which is widely used in the National Weather Service, private sector, and in academia for analyzing thunderstorm events.

The duties of this position are:
1. Developing and/or testing new multi-sensor (e.g., satellite, lightning, numerical models) algorithms and techniques (e.g, machine learning) for short-term probabilistic prediction and nowcasting;
2. Acquire and apply expertise in severe local storms and the warning-decision-making process;
3. Participate in applied research and operational experiments in the Hazardous Weather Testbed’s Experimental Warning Program that facilitate the evolution of how severe convective weather threats are analyzed and communicated;
4. Attend meetings and professional conferences to present research results and interact with collaborators and users; formally publish results when appropriate;
5. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science.

The minimum qualifications for the position are:
1. A Masters Degree in Meteorology, Atmospheric Science, Geographic Information Systems, or related area;
2. Experience with scientific programming on UNIX/Linux using a high level language (e.g. C++, Java, Python)
3. Experience with statistical methods or software for meteorological data analysis and visualization
4. Interest in new radar algorithm development for severe storm detection and diagnosis
5. Ability to communicate scientific research through conference presentations, formal publications and technical documents

Applicants should identify expertise with any of the following areas: Severe Local Storms; Machine Learning; Statistics; Warning Decision Making; Weather Radar; Lightning Data; Numerical Modeling; Remote Sensing and Satellite. Strong oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems,
programming skills (including web-based and mobile applications) and Geographic Information Systems.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Works under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams and supervise students.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
ATTN: MRMS Severe Weather Applications

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CIMMS Research Associate - Severe Convective Weather Radar Applications

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma currently is seeking a research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and testing of new severe weather applications for the detection and diagnosis of tornadoes and hail.

The duties of this position are:
1. Development of new applications and techniques for the analysis of WSR-88D data, including tornado and mesocyclone detection algorithms;
2. Evaluation of existing Radar-based products and applications, specifically focusing on data quality control and short-term nowcasting (0-2 hour) of severe and convective events;
3. Acquire and apply expertise in severe local storms and the warning-decision-making process;
4. Attend meetings and professional conferences to present research results and interact with collaborators and users;
5. Meet with collaborators and provide regular summaries of work accomplished;
6. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science;
7. Plan and execute the evaluation of new applications and techniques in the Hazardous Weather Testbed.

The minimum qualifications for the position are:
1. A Masters Degree in Meteorology, Atmospheric Science, Geographic Information Systems, or related area;
2. Computer programming and scripting experience (e.g. C++, Java, Python);
3. Skills in the interpretation of weather radar data.

Applicants should identify expertise with any of the following areas: Computer Programming; Weather Radar; Visualization; Geographic Information Systems; Warning Decision Making; MRMS; WDSS-II. Good oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems and programming skills (including application development and scripting).

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.
General supervision will be provided by the CIMMS leadership. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Appointee will work under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams.

The beginning salary will be dependent on experience, with University of Oklahoma benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke  
Executive Director, Finance and Operations  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
treinke@ou.edu  
ATTN: Severe Weather Radar Applications

_The University of Oklahoma is an equal opportunity/Affirmative Action employer._
I’m delighted to invite you to the annual Enterprise and the Environment Summer School at the University of Oxford. This is a unique programme which teaches across the Smith School’s strengths in environmental economics and policy, enterprise management, and financial markets and investment. During the Summer School we will explore critical global environmental challenges in the 21st century through a combination of science, diverse stakeholder engagement, and analysing the value of the environment to enterprise.

The Smith School is a leading interdisciplinary academic hub focused upon teaching, research, and engagement with enterprise on climate change and long-term environmental sustainability. We work with social enterprises, corporations, and governments; we seek to encourage innovative solutions to the challenges facing humanity. We are excited to be holding our fourth Summer School and hope to meet you in Oxford in June 2019.

Professor Cameron Hepburn  
Director, Smith School of Enterprise and the Environment

Dates: 30 June – 12 July 2019  
Accommodation: Jesus College, University of Oxford  
Teaching Venue: School of Geography and the Environment, University of Oxford  
Website: www.smithschool.ox.ac.uk/courses/summer-school/  
Contact: summerschool@smithschool.ox.ac.uk  
Early Bird Price: £2850 (for payments made prior to 12 April 2019)  
Full Price: £3100 (for payments made after 12 April 2019)