

Earth and Environmental Systems Institute

Scientific Programmer The Pennsylvania State University

The Earth and Environmental Systems Institute (EESI, http://www.eesi.psu.edu) at The Pennsylvania State University invites applications for a non-tenure line, full-time Scientific Programmer position. Successful candidates will become part of a transdisciplinary research team working on Climate Risk Analysis (https://clima.psu.edu), Multisector Dynamics of Coupled Human and Earth Systems (https://pches.psu.edu), and Stakeholder-Engaged Decision Support (https://marisa.psu.edu) under support from sponsors including NSF, DOE, and NOAA. This deeply collaborative research environment provides participants with unique opportunities for research, education, cross-institution collaboration, and professional development. The selected candidate will work with students, faculty, and postdoctoral researchers across multiple departments to develop modeling, data processing, visualization, decision analysis, and outreach tools for our integrated research efforts. Desired areas of expertise include developing and running Earth system, integrated assessment, agricultural, ecosystem, and hydrological models and/or their components; econometric analysis; geophysical and economic data visualization; model coupling and parallelization; statistical analysis of large datasets; and development of web-based, interactive tools. The primary languages used by the team include R, Python, Julia, Matlab, and GAMS; significant experience with model development and data analysis in one or more of these languages is essential. Experience working in high-performance computing environments (e.g. Linux clusters) and with additional relevant languages such as C/C++, Fortran, Javascript, or NCL is also desirable. Initial projects may include (but are not limited to) development of tools for model coupling, data format translation, multi-objective trade-off analysis, uncertainty quantification, deployment of large model ensembles, climate downscaling, and web delivery of climatic datasets.

Candidates should have a Master's degree or Ph.D. in a relevant field and a demonstrated record of achievement in scientific computing. Fixed term academic rank will be commensurate with education and experience. This is a fixed term appointment, funded for one year from the date of hire, with possibility of renewal. Applicants should upload a cover letter, a resume/CV, and contact information for at least three professional references, all in PDF format. The cover letter should explain the applicant's interest in the position, highlight relevant qualifications and experience, and include links to at least two examples of relevant prior work. Applicants should also provide evidence, either woven through their application materials, or as a separate diversity statement, of a commitment to fostering diversity, equity, and inclusive excellence and engagement in their work environment. Review of applications will begin immediately, and the position will remain open until filled. Questions regarding the position should be directed to Dr. Robert Nicholas (ren10@psu.edu).

Apply online at https://psu.jobs/job/90955

To review the Annual Security Report which contains information about crime statistics and other safety and security matters and policies, please go to https://police.psu.edu/annual-security-reports, which will also explain how to request a paper copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.