Postdoctoral Researcher in Air Quality Modeling

Specific Qualification:
• A recent PhD degree in environmental/chemical engineering, atmospheric sciences, or closely related field with a strong interdisciplinary background in air quality, cloud/aerosol microphysics and chemistry, climate/meteorology, emission processing and modeling, meteorological and chemical data assimilation, and uncertainty qualifications;
• Experience in the development, application, and evaluation of 3-D atmospheric/Earth system models such as WRF/Chem, WRF/CMAQ, WRF/CAMx, CESM/CAM5, and E3SM, street-scale models such as Street-in-Grid model, ADAM-Urban, and application of machine learning in atmospheric and Earth system models;
• Experience in handling large observational datasets from various platforms including surface networks, aircrafts, and satellites;
• Familiar with FORTRAN 90/C++ and UNIX/Linux systems and parallel computing on linux computer/supercomputer systems;
• Excellent oral and written communication skills.

Job Duties:
• Develop, improve, apply, and evaluate 3-D air quality/Earth system models from global to street scales, and link air quality/extreme weather predictions to personal exposure models for health risk/impact assessment;
• Assist the project P.I. in completing various research tasks, project reports, proposals and meeting technical requirements and deadlines;
• Disseminate research results at national/international conferences and peer-reviewed journal papers;
• Mentor and train graduate students for research

Specific Qualification (shorter version)
• A recent PhD degree in environmental/chemical engineering and atmospheric sciences with a strong interdisciplinary background in air quality, climate, emission, data assimilation, uncertainty qualifications, and machine learning;
• Experience in development, application, and evaluation of 3-D atmospheric/Earth system models such as WRF/Chem and CESM/CAM5;
• Familiar with FORTRAN 90/C++ and parallel computing on linux computer/supercomputer systems; Excellent oral and written communication skills.

Required Documents include
1. Curriculum Vitae
2. Cover Letter
3. Research Statement
4. References (3 required)
5. Sample Journal Papers (1-2)

To apply to the position, please submit your application at https://careers.hrm.northeastern.edu/en-us/job/502776/postdoctoral-research-associate. Review of the applications will begin immediately and will continue until the position is filled. For technical inquiry, please contact Dr. Yang Zhang at ya.zhang@northeastern.edu