NOA1778 Support Scientist-
Aerosol Data Assimilation
NOAA/NCEP
College Park, MD

I.M. Systems Group, Inc. (IMSG) is seeking candidates to support the Environmental Modeling Center (EMC) of the National Centers for Environmental Prediction (NCEP) on the assimilation of aerosol observational data in the NCEP atmospheric data assimilation systems. The candidate would be working within the Data Assimilation Team on building an advanced aerosol assimilation capability into the Gridpoint Statistical Interpolation (GSI) in the short term, with an evolution toward using components from the Joint Effort for Data Assimilation Integration (JEDI) being led by the Joint Center for Satellite Data Assimilation.

Duties:

- Modify GSI to process aerosol background fields and coordinate with JEDI team about incorporating aerosol observations into JEDI/UFO development.
- Estimate aerosol observation and background errors, and explore the possibility of generating and utilizing ensemble information, including multivariate information between aerosols and other atmospheric variables.
- Run sensitivity experiments to demonstrate that the new codes perform correctly (single observation tests), followed by parameter tuning and optimization.
- Validate the resultant aerosol analysis against external analyses and independent datasets.

Required Skills:

Education and Experience

- Ph.D., M.S. or relevant experience in Computer Science, Atmospheric Science, or other related physical or mathematical science.

Knowledge, Skills and Abilities:

- Experience in two or more of the following areas is required: Atmospheric data assimilation, aerosol or atmospheric chemistry modeling, the GSI analysis system; or optimization of complex scientific code in a parallel programming environment.
- Experience with running complex jobs, and processing large amounts of numerical output data on mainframe supercomputers and/or workstations in a FORTRAN/UNIX environment, using advanced statistical and display tools.
- Experience working in a team environment. Good written and oral communication skills are highly desirable.

- The desire and ability to learn and develop scientific capability is essential.
- Ability to obtain all necessary security clearances for access to NCEP operational computer systems (permanent resident status or US citizen is required).

To Apply:

Please apply directly to our career portal or website: www.imsg.com or https://careers-imsg.icims.com **(NOA1778 Support Scientist-Aerosol Data Assimilation).** Include your resume, three references with contact information and a cover letter explaining how your qualifications meet the requirements of the position. Please indicate your timeline of availability and preferred salary level for consideration.

IMSG offers an outstanding overall Benefits Package including company paid leave, medical dental, vision, and 401K. IMSG is an Equal Opportunity Employer and Veteran Friendly.