

Postdoctoral Researcher for Space-Based Near Earth Asteroid Detection, Tracking, and Characterization

School of Aerospace Engineering, Georgia Institute of Technology

August 8, 2017

Job Title	Postdoctoral Researcher
Area	Postdoctoral Researcher for Space-Based Near Earth Asteroid Detection, Tracking, and Characterization

Description:

Applications are invited a postdoctoral position in the School of Aerospace Engineering at the Georgia Institute of Technology. Principal responsibilities include 1) algorithm selection and implementation for low-SNR detection, tracking, and characterization of Near Earth Asteroids on a space-based electro-optical instrument. 2) definition of a data pipeline to share detections with the Minor Planet Center, 3) coordination with the with faculty at Georgia Tech and Purdue University, as well as our spacecraft manufacturer and instrument hardware providers, and 4) mentorship to graduate students working on this project. In future years the position responsibilities may include oversight of the instrument integration, environmental testing, and on-orbit science operations. The successful applicant will work under the supervision of Prof. Marcus Holzinger (www.holzinger.gatech.edu).

Applicants should possess a working knowledge of standard telescope sensor processing for astrometric / photometric measurements, detection methods, orbit estimation, scientific computing, linux-based systems, and languages such as Python/C/C++. Familiarity with electro-optical sensors (e.g., sCMOS), optics, and CPU / FPGA computing architectures are desirable but not required.

This position is for one year, with potential extensions for an additional two years contingent on satisfactory performance. This is a full-time position, and the successful applicant will receive salary, benefits, and travel support to relevant conferences. Work will take place in the Space Systems Design Laboratory (SSDL, <http://www.ssd1.gatech.edu/>).

Qualifications:

Applicant must have a Ph.D. in a related field.

Instructions:

To apply, please submit a cover letter, 2 page statement of research interests, full CV including publications, and contact information for 3 references as a single pdf file to tamecia.wright@aerospace.gatech.edu. Contact Prof. Holzinger (holzinger@gatech.edu) with any questions related to this opening. Applications will be reviewed starting August 28, 2017, however, the position will remain open until filled.