Research Lab at VT:
Learning Enhanced Watershed Assessment System (LEWAS) Lab

Background of the Lab: The Learning Enhanced Watershed Assessment System (LEWAS) is a unique real-time high-frequency environmental monitoring lab established to promote environmental monitoring education and research at Virginia Tech. The LEWAS lab has a field site, which is located at the outlet of a small creek (Webb Branch) that flows through the Virginia Tech campus. At present, the LEWAS has the following four stages: 1) Instruments in the field site that are used for environmental monitoring including an acoustic Doppler current profiler, a water quality sonde and a weather station taking measurements every 1-3 min., 2) data processing occurring locally on a Raspberry Pi, 3) data storage on a remote server and 4) end user interfaces, which enable users to visualize LEWAS data, e.g., the Online Watershed Learning System (OWLS) (www.lewas.centers.vt.edu/dataviewer) for research and education. An interdisciplinary team of undergraduate and graduate students with diverse backgrounds and skill sets advances and maintains the LEWAS.
LEWAS Website: http://www.lewas.centers.vt.edu/

Position: Back end and front end programmer

Requirements: We are currently looking for an experienced VT undergraduate student to help us manage our full-stack infrastructure. The LEWAS provides a holistic view to software development, which include maintaining an API, large database, website / web application, and sensor parsing code at our field site. It's a hands-on, live production system which is constantly evolving as the needs of the lab change. Applicants should have reasonable proficiency in:

- Multiple programming languages (Python and Javascript preferred)
- Knowledge of designing and structuring a RESTful API
- Basic experience of Linux fundamentals

Compensation: The person will be recruited to start working during the Fall 2017 semester on an hourly wage position. According to performance, the job will be extended for the next semester.

Contact Information: Please contact Ms. Debarati Basu (debarati@vt.edu) if you have questions. Also, send Ms. Basu your resume and cover letter, if you are interested in applying.

This advertisement is approved by the LEWAS Lab Director: Dr. Vinod K Lohani