United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Great Lakes Science Center
1451 Green Road
Ann Arbor, MI 48105-2807
PH: (734) 994-3331 FAX: (734) 994-8780

January 4, 2022

Position: Research Assistant (Student Services Contractor) <u>1 position available</u>
Location: Great Lakes Science Center, Ann Arbor, MI
Salary: $31.06 per hour; Approximately 40 hours per week.

Duration of position: This is a contract position that will begin as early as April 10, 2022. The intended duration is one year (April 10, 2022 – April 08, 2023) with possible extension dependent on future funding.

Project: Evaluating fish passage in restored coastal wetlands using imaging sonar and machine learning models

Position Description: The student contractor will serve as a Research Assistant supporting the ongoing development of machine learning models and other novel methods to process, store, and analyze imaging sonar data collected at the U.S. Fish and Wildlife Service Shiawassee National Wildlife Refuge. The contractor will be based at the USGS Great Lakes Science Center in Ann Arbor, MI and play a critical support role for USGS research by assisting with a variety of duties that include, but are not limited to:
- Writing Python scripts for data processing and integration with high-performance computing resources
- Contributing to designing, developing, and refining an online annotation tool that will be used by Refuge staff to create labeled training data from hydroacoustic sonar imagery data files
- Cleaning and using training data to train and evaluate machine learning models
- Collaborating with a development team spanning data science, advanced computing, and biology
- Performing minor field duties (i.e., travel to study sites, interact with imaging sonar units including maintenance and system set-up, general field monitoring work)
- Assisting with imaging sonar experiments, including improving current sonar deployment set-ups and operating system efficiencies, analyzing data, and producing communication products
- Assisting in creating, updating, and refining various scientific reports and publications

Education/Experience Requirements: The successful candidate must have:
- A Master's degree in computer science and/or data science, biology, ecology, or a related field that was awarded less than one year prior to beginning the contract
- A valid U.S. driver's license
- Programming skills; Previous experience with Python, Django, PostgreSQL, React/Redux, Linux, and/or Git experience is preferred, but not required
- Great attention to detail, a desire to learn, and the ability to work in an efficient and self-directed manner
- High motivation with the ability to multi-task and work collaboratively in a team setting

Other Details: This contract covers a 52-week period with an anticipated start date of April 10, 2022. The student contractor will not receive holiday pay, annual or sick leave, or health care benefits, nor will they receive overtime pay for hours worked in excess of 80 within a two-week period. Hours in excess of the established 80 per two weeks will be paid at the regular hourly rate. The student will report to the Great Lakes Science Center in Ann Arbor, MI, for all duties, unless otherwise specified. Office work will occur in an office equipped with a computer workstation. Moving expenses will not be paid.

The successful candidate will be hired as an independent contractor. This is not a government position, and time does not count toward time-in-service.

<u>The application deadline is **January 16th, 2022**</u>. To ensure consideration of your application, please send a cover letter, resume or CV, and a list of three professional references to Alexandra Bozimowski (abozimowski@usgs.gov, (734) 994-3331 ext. 391).