



### Three Fully Funded Ph.D. and one MS Positions in Hydroinformatics at Clemson University

Clemson Hydroinformatics lab (<http://hydro-informatics-lab.com/>) is seeking to hire three Ph.D. and one MS students in the areas of hydroinformatics. The positions will focus on developing advanced informatics and deep learning models for water resources. The selected applicants will be admitted to Clemson Agricultural System Management (3 PhD students) and the School of Computing (1 MS student). The students have opportunities for overseas study visits or short internships at recognized universities in Europe. Financial support to attend national and international conferences and meetings will also be provided. Each position is described separately. Please mention in your cover letter which position you are interested in. The positions are described as follows.

**Ph.D. Positions 1 & 2- Water Research Software Development:** Two PhD students will be selected to work on developing C++ software to address challenges associated with water system modeling. The selected candidates will work on computationally intensive tasks to create highly optimized water system models integrating both traditional and deep learning models.

**Ph.D. Position 3- Stormwater Modeling:** This position focuses on enhancing the FAIS prototype (<http://floodanalytics.clemson.edu/>) that was developed by our team in 2019. The new design will provide flexible mechanisms for leveraging advanced deep-learning algorithms to enhance stormwater modeling fidelity.

**MS Position in Computer Science:** This is a heavy web-based computing position. The position focuses on creating a comprehensive, web-based guide to empower users and developers to develop and deploy web-based applications and pre-trained algorithms. The selected candidate should have experience in front-end and back-end development to build interactive web interfaces.

**Eligibility Requirements:** PhD applicants should have a master's degree in civil engineering-water resources, environmental engineering, computer science, or agricultural engineering, and have previous experience working with C++, Python, & Java. The MS applicant should have a BS in computer science and engineering.

**Application:** Please include the following information with your application and submit it as a single PDF file to [hydroinformatics@clemson.edu](mailto:hydroinformatics@clemson.edu). **A minimum GPA of 3.6 out of 4.0 is required.**

- Your contact details and personal data
- Your highest degree
- Your language skills
- Your GPA and GRE/Tofel scores
- Contact details for 2–3 references

and, in addition, please include the following documents

- Cover letter- brief description of prior research experiences and relevant work experiences, motivation for participating in this research program, expected personal gains/impacts from this research experience, and career plans after graduation.
- CV – degrees and other completed courses, work experience, and a list of degree projects/theses.
- An unofficial copy of the current transcript.

**Deadlines:** The application deadline is March 14<sup>th</sup>, 2025, at 5:00 pm (EDT). The positions will be finalized by April 15<sup>th</sup>. **Women and under-represented minorities are strongly encouraged to apply.**



### **Clemson Hydroinformatics lab 'Justice, Equity, Diversity, and Inclusion Statement**

We believe in Justice, Equity, Diversity, and Inclusion and ask all members of our lab to take an active role in making our group a welcoming and inclusive environment for everyone. To do that, we pledge to embrace the following values:

- To be inclusive and treat all members of our community with respect regardless of race, gender, sexual orientation, abilities/disabilities, beliefs, technical skills, or position.
- To refrain from making assumptions or judgments about my fellow community members.
- To Listen and be considerate.
- To embody empathy and compassion in all my personal interactions and communications.
- To routinely reach out to other lab members to offer assistance and support.
- To critique respectfully and constructively and engage in respectful discourse with the lab members whose perspectives differ from my own, recognizing that differences of opinion do not signify rightness or wrongness.
- To continually reflect on both the intended and unintended consequences of my comments and actions.
- To intervene when I see acts of hate, injustice, or discrimination targeted to others.

### **Employer**

#### **Clemson University**

Clemson University has the highest Carnegie research designation (R1) and recently completed its Clemson Forward plan with a current strategic plan focusing on Clemson ELEVATE that will lead our university to increased national preeminence in education, research, and service. Clemson ELEVATE has at its core the mission of ensuring that every student thrives, discovery drives results, and service builds community. South Carolina's highest-ranked national university is located at the foot of the Blue Ridge Mountains and surrounded by Lake Hartwell and the Clemson Experimental Forest. The 1,400-acre campus is part of the 18,000 acres of University Farms and Forests devoted to teaching and research. A top-25 public university with a reputation for excellence, Clemson University provides a hands-on education - in the lab, in the classroom, and the field. Academic programs lay the groundwork for innovative research, and real-world experiences carry forward to rewarding careers. This strikingly beautiful campus enjoys a temperate and pleasant climate.

### **Department**

The Department of Agricultural Sciences is located within Clemson University's College of Agriculture, Forestry, and Life Sciences (CAFLS). Our MS and Ph.D. degree programs with a concentration in Agricultural Systems Management (ASM) are administered by faculty known for their commitment to teaching, research, and Extension. Our graduate degree programs will help students build a lasting foundation, level up their skills, and construct the next chapter of their success story. Surrounded by a community of open-minded thinkers, students find their path to success, confidence, and competitive advantage at our department. Primary research areas of our department cover aspects of agriculture with emphasis on precision agriculture, agricultural robotics, power machinery, biomass handling and processing, irrigation and drainage, water management, soil and water conservation, and sensors. The department is led by over 30 full-time and accomplished faculty. Our faculty has received funding from the National Science Foundation (NSF), the National Institute of Food and Agriculture (NIFA), and the U.S. Department of the Interior, among others. We encourage you to review our website (<https://www.clemson.edu/cafls/agricultural-sciences/index.html>) for further information.