Opportunity Title: UT-ORII SMaRT Internship Program for Summer 2024

Opportunity Reference Code: UT-ORII-SMARTSUMMER-2024

Description
Are you a current undergrad looking for a prestigious research opportunity? Do you want to gain hands-on experience at a national laboratory?

The University of Tennessee - Oak Ridge Innovation Institute (UT-ORII) is seeking applications from undergraduate students currently enrolled in colleges and universities across the US who are interested in participating in its Science Alliance Student Mentoring and Research Training (SMaRT) Program. Students who will be rising sophomores, juniors and seniors in the Fall 2024 semester are eligible to apply. This prominent program will select approximately 40 qualified candidates to participate in a 10-week summer program scheduled from May 28 until August 2, 2024 (approximate dates). As a selected intern, you will receive a funded internship, including stipends, housing and an allowance for travel to and from Knoxville, TN.

You will engage in interdisciplinary research jointly administered by some of the nation’s top researchers from The University of Tennessee and Oak Ridge National Laboratory. Dedicated graduate student mentors will work closely with you, and through focused professional development activities you will prepare materials necessary to apply for future opportunities. This summer program will build your network, build your resume and prepare you for the next steps in your academic and professional career.

This program will focus on four interdisciplinary areas:
1. Advanced Science and Engineering of Materials and Manufacturing - Focus on advanced manufacturing and processing technologies at the intersection of modeling and simulation, artificial intelligence (AI), and advanced sensors and controls to enable digital and secure manufacturing.
2. Autonomous, Smart, Secure and Resilient Energy Systems - Pursue transformative systems that integrate automation and security using computational tools and methodologies for reducing the cycle time from design to manufacture and improving efficiency, durability, and reliability.
3. Electrochemical Energy Systems - Explore cost-effective electrochemical and chemical energy systems, i.e., batteries, fuel cells, electrolyzers and synthetic fuels for integrated systems linking clean energy generation to utilizations, relevant to non-mobile (grid) and mobile (electric vehicles) applications.
4. Predictive Systems Biology for Circular and Sustainable Economies - Focus on research needed to develop microbial strains optimized for efficient and economically viable and scalable contaminant degradation and subsequent chemical feedstock recycling, and conversion of biomass into useful products.

*Data science and engineering threads will be woven through each of these four areas.

Benefits to you as a SMaRT Intern:
The interdisciplinary atmosphere provided at the UT-ORII will expose you to team science, an increasingly important platform for research. As an intern, you will also gain first-hand research experience in emerging fields (e.g. quantum information sciences and data sciences) while working with state-of-the-art research instruments (e.g. 3D printers of metals and polymers). Together, these experiences will help prepare you for exciting and rewarding careers. Interns will prepare CVs, personal statements for future opportunities, as well as short research presentations and scientific posters that can be presented at conferences. Graduate student mentors will work closely with SMaRT interns, and will be available to share their graduate school experiences.
Overall, participation in the SMaRT Program will help you understand and evaluate their future career options, including in academia, national laboratories, and in the industries of the future.

**Stipends, Housing and Travel:**
- The stipend will be $694 per week.
- University of TN on-campus housing will be provided. Housing will be apartment style.
- Travel will be reimbursed for inbound and outbound expenses up to $1,000 for participants who live more than fifty miles, one-way, from the assigned hosting site.

**About the Oak Ridge Institute at The University of Tennessee (UT-ORII):**
The University of Tennessee (UT) and Oak Ridge National Laboratory (ORNL) have launched UT-ORII to foster interdisciplinary research and education. The primary goals of the institute are to: attract talent to East Tennessee and to develop a world-class STEM workforce that will, among other things, create and lead the industries of the future. UT-ORII brings together faculty, research scientists, students, and ORNL researchers to create a collaborative environment in which interdisciplinary discovery and creativity flourish.

Click on the following links for the [UT-ORII SMaRT Internship website](#) and a video from the [UT-ORII—2021 Summer Internship Program](#). Also visit the [University of Tennessee-Oak Ridge Innovation Institute's LinkedIn page](#) and scroll back to see posts from June and July 2023 with stories from the Summer 2023 internship.

**Have questions about the program or how to stand out as a top candidate?**
- Please email our recruiter at marlo.milton@orau.org
- Dr. Shawn R. Campagna has reserved office hours for drop-in visits related to these opportunities if you are local. His office is open to visitors after 3 p.m. EST each Friday. He can be reached via email at campagna@utk.edu.

**To apply, be sure to have the following:**
- Statement of Interest/Personal Statement (explaining goals, experiences, and skills relevant to the SMaRT Program)
- Resume or CV (PDF)
- Transcripts/Academic Records
  - Unofficial transcripts or copies of the student academic records printed by the applicant or by academic advisors from internal institutional systems may be submitted.
  - Transcripts/Academic Records must include name of the academic institution, name of the student, and all completed/in progress coursework.
  - Transcripts/Academic Records must show the equivalent of at least one year of full-time post-secondary school attendance prior to Summer 2024.
- Two Letters of Recommendation are required. The Zintellect system will send notifications to referees on your behalf when you supply names and email addresses during the application process.

**Eligibility Requirements**
- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Currently pursuing an Associate's Degree or Bachelor's Degree.
- **Discipline(s):**
  - Chemistry and Materials Sciences (12)
  - Computer, Information, and Data Sciences (17)
  - Earth and Geosciences (21)
  - Engineering (27)
  - Environmental and Marine Sciences (14)
  - Life Health and Medical Sciences (46)
  - Mathematics and Statistics (10)
  - Physics (16)
  - Science & Engineering-related (1)
  - Social and Behavioral Sciences (28)
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- **Age:** Must be 18 years of age