

REU
Summer
'23

ANVIL

FORGING THE FUTURE OF COMPUTING

RESEARCH EXPERIENCES FOR UNDERGRADUATES

Research Computing Internships

The Rosen Center for Advanced Computing (RCAC) is seeking students for Research Experiences for Undergraduates (REU) paid internships for Summer '23. This program aims at developing the next generation workforce in advanced computing and cyberinfrastructure technologies. It offers students from diverse backgrounds, the opportunity to gain the knowledge and skills necessary to build and support advanced research computing systems and scientific applications. Modeled after the RCAC's decade long successful student apprentice program, the REU students will learn by doing, working on the National Science Foundation funded Anvil system in a team environment and mentored by cyberinfrastructure professionals.

Internship Projects

- 1 Data Analytics:** Instrument and perform analysis of scientific application workloads on the Anvil system.
- 2 High Performance Computing (HPC):** Extend the Anvil system to burst scientific workflows into the Microsoft Azure cloud.
- 3 Kubernetes:** To support science gateways applications, extend Anvil's Kubernetes-based composable subsystem to use cloud-based Kubernetes clusters.
- 4 Containers to Support Education:** Enable the use of large-scale notebook deployments to provide interactive access to Anvil in support of education

Open to undergrad students from all backgrounds. Each student will present their work to Purdue staff, faculty, and researchers at the end of the program, and may present at a national conference as part of the program.

Applicants must be U.S. citizens.

For more information please visit the site below

www.rcac.purdue.edu/anvil/reu

Please email any questions to: Anvil@purdue.edu

