USA-India International Research Experience for Students (IRES - 2024)

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Digital manufacturing relies on connected design, manufacturing and characterization systems and is a very interdisciplinary field. This research experience program is designed as an interdisciplinary opportunity where students from Computer Science and Electrical Engineering can work with the students from Mechanical Engineering, Materials Science to understand the needs of connected manufacturing cyber-physical systems.

This 8-week USA-India IRES program will bring the selected US students to India for 5 weeks to work under the research mentors of faculty at the Indian Institute of Technology-Tirupati. The participants will spend the first two weeks virtually in the pre-program instructions and then assemble onsite at IIT Tirupati for about 5 weeks. Each visiting US student will be partnered with an Indian student for the research experience program. The program funds only the US students and will not pay any stipend or travel expenses to the Indian students. They will be responsible for their own expenses to visit IIT Tirupati for the program. Upon completion of the program, the Indian students will receive a participation certificate from the program organizers. It is a full-time program for 8 weeks and the participating students are expected to commit for the entire duration of the program.

The IRES program will run from June 17-August 9, 2024. (The first two weeks will be conducted virtual, in person IIT Tirupati component will be from around July 1-July 30)

Topic 1: Feasibility investigation of 3D printable polymer composites
Topic 2: Imaging and image processing in 3D printing to detect defects
Topic 3: Property predictions of the additively manufactured components using ML approach

Program eligibility:
- The applicant must be a registered student in any engineering program in an institution in India at the bachelor's level.
- The applicant should not be graduating before December 2024.
- Commit to all 8 weeks of the program and willing to travel to IIT-Tirupati for the program on their own expenses.

Application Deadline: March 1, 2024

Apply here (https://t.ly/6Srkq)