Undergraduate Research Assistant Job Opening
Secor Group
Department of Mechanical Engineering
Iowa State University

The Secor Group in the Department of Mechanical Engineering explores advanced materials and manufacturing technologies, with a focus on digital printing of devices for sensing, electronics, and energy applications. One of our current projects aims to study and improve an additive manufacturing process called aerosol jet printing (AJP), a versatile method for patterning metallic nanoparticles, polymers, ceramics, and biomaterials. This is useful in a variety of applications, such as rapid prototyping of electronic devices.

We have active projects to develop process control methods for AJP and modify this technology for new manufacturing applications. To aid in these efforts, we are looking to fill one undergraduate research assistant position, focused primarily on mechanical design. Exact responsibilities will be based on student’s previous experience and future interests, but will likely include some of the following:

**Mechanical design project:**

- Design, fabrication, and testing of aerosol jet printhead components
- CAD modelling (Solidworks or similar software experience preferred)
- Operation of 3D printers and metal fabrication equipment (mills, lathes)
- Hands-on printing and print characterization with aerosol jet printers

We anticipate hiring second year or later engineering students who have demonstrated competence and creativity in coursework, projects, internships, and/or extracurricular activities. This position will be paid for the 21-22 academic year at $12/hr for up to about 10 hrs/week. To be considered for this position, please email your resume to Dr. Ethan Secor (esecor@iastate.edu) and Jeremy Rurup (jerurup@iastate.edu) by end of day **September 10th**. We would be happy to answer any questions you might have regarding this position.