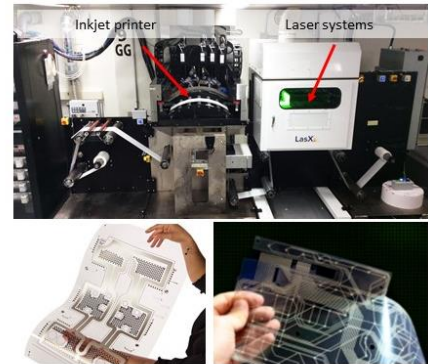


Graduate Research Assistant Opportunity in Flexible Printed Electronics at Birck Nanotechnology Center

Project Description:

This research focuses on scalable manufacturing technologies including printing and laser processing technologies to create flexible cost-effective circuits for potential use in wearable healthcare, smart packaging, and automobiles. This research will focus on identifying materials and process optimization for creating proper circuit geometry, with required dielectric / insulation materials to minimize electrical interference between adjacent printed signal lines. The research will evaluate electrical and mechanical characterization of the printed circuits. The student will have the opportunity of working with the state of the art roll-to-roll electronic printing facility at Birck Nanotechnology Center and directly engage with one of the leading automotive industries in USA through weekly meetings and onsite visits. The students involved in this project will be co-advised between ECE and MSE department to perform cutting edge research and advance the field of flexible printed electronics.



Assistantship: Paid $\frac{1}{2}$ and $\frac{1}{4}$ time (with tuition waiver and monthly stipend)

Location: Birck Nanotechnology Center

Basic Qualifications

- Must be a graduate student at Purdue in Electrical and Computer Engineering, Mechanical Engineering, Material Science, Industrial Engineering, or other Relevant Fields
- Familiarity with general and microcontroller programming languages (e.g. Python, C, Arduino)
- Familiarity with design/layout of Printed Circuit Board (PCB) and required softwares
- Knowledge on DC and AC electrical measurements and instrumentation equipment (O-scope, Impedance Analyzer, Network Analyzer, etc).
- Highly motivated and must work well in a team environment
- Ability to communicate effectively, both verbally and in writing
- Must possess organizational, interpersonal, and problem-solving skills
- Students with publication records are preferred
- Students with prior electronic/RF device development experience with strong interest in medical device development are preferred

Interested applicants must send their CV, including GPA, list of publications/conferences, list of references, TOEFL (if applicable) and GRE scores to Prof. Rahimi at rrahimi@purdue.edu