

## Open position for a full-time research technician in microfabrication and instrumentation.

The <u>Biologically Inspired Engineering Systems (BIOLines</u>) Laboratory in <u>the Department</u> of <u>Bioengineering at the University of Pennsylvania</u> invites applications for a full-time research technician position. Our group focuses on developing new design principles and microengineering approaches inspired by living biological systems to create novel devices and materials that improve human health and promote environmental sustainability.

Applicants are expected to hold a bachelor's degree in mechanical engineering, electrical engineering, biomedical engineering, or other related fields. The successful applicant should have demonstrable competency or hands-on experience in <u>one or</u> <u>more</u> of the following areas:

• **Design and development of robotic platforms and their control systems:** Understanding of design, assembly, and operating principles for highperformance robots capable of tasks possibly ranging from 3D printing, to liquid handling, to 5-axis machining of metals and composites.

• *Electronic circuit design and prototyping:* Familiarity with component selection and circuit/PCB design power electronics, motor control, signal processing, instrumentation and telemetry, microcontroller programming, etc.

- *Micro- and nanofabrication via cleanroom techniques and soft lithography:* Fabrication of microfluidic templates and devices in photoresists, PDMS, hard plastics, and other substrates using soft lithography and photolithographic techniques.
- **Software development:** Development of software to enable reliable server-client communication with microcontrollers and high-bandwidth, real-time telemetry from embedded instruments to decision-making control systems.

In this position, you will gain a strong proficiency in all of the skillsets above, and participate in highly varied interdisciplinary research projects at the interface of materials science, human microphysiological devices, cleanroom nanofabrication, and automation robotics to produce high-impact research.

Interested applicants should send an electronic copy of their CV to Prof. Dan Huh at <u>huhd@seas.upenn.edu</u>. For more information, please visit our website at <u>http://biolines.seas.upenn.edu</u>.