Honda Research Institute USA (HRI-US) strives to be at the cutting edge of Honda's research and development activities. Driven by Honda's global slogan - The Power of Dreams - we pursue emerging technologies and bring them into reality to make people happy by engaging daily in highly scientific, pioneering work. We realize that dreams don't come from organizations, systems, or money. They come from people, and we seek people who have such a challenging spirit to join us.

Currently, HRI-US (Silicon Valley) is offering fall/winter research internships to highly motivated Ph.D. (and qualified M.S.) students. Interns will work closely with HRI researchers, and publishing results in academic forums is highly encouraged. We are looking for candidates with good publication track records and excellent programming skills to join our team!

How to Apply: Please send an e-mail to careers@honda-ri.com with the following:
- Subject line including the job number(s) you are applying for
- A cover letter
- Recent CV
- Topics you are interested in (optional).
Candidates must have the legal right to work in the U.S.A.

List of available positions:

Embedded System Engineering [Job Number: P19INT-40]
Sensor Microfabrication [Job Number: P19INT-41]
Embedded System Engineering [Job Number: P19INT-40]
This internship position focuses on embedded system prototyping for wearable sensors. The candidate is expected to have a wide range of experiences from analog circuit design to graphical user interface.

Responsibilities:
- Analog circuit design for sensor and power management
- Printed circuit board design and prototyping for embedded systems
- Firmware programming
- Developing and implementing graphical user interfaces

Qualifications:
- Ph.D. or highly qualified M.S. candidate in electrical engineering, mechanical engineering, or related field
- Hands-on experience in digital circuit design and programming, such as low-power microprocessor, on-board communication (e.g. I2C), wireless interface, and power management.
- Practical skills in analog low-noise signal amplification, filtering, and analog to digital conversion.
- Experience in printed circuit board design from schematic to Layout
- Experience in coding graphical user interface with peripheral devices.
- Familiarity with lab equipment such as Oscilloscope, network analyzer, and LCR meter
- Experience in circuit prototyping in a lab (e.g., lithography, assembly) is preferred
- Duration: 4-6 months

Sensor Microfabrication [Job Number: P19INT-41]
This internship position focuses on sensor device fabrication using nano-micro fabrication technology. The candidate must possess excellent interpersonal and communication skills, eagerness for creation, and have a flexible approach to solving problems.

Responsibilities:
- Participate in design and fabrication of sensors using nanomaterials.
- Establish versatile process conditions of microfabrication at on-site cleanroom facility
- Assist with prototyping of device from die to system level

Qualifications:
- Ph.D. or highly qualified M.S. candidate in mechanical engineering, physics, or related field
- Strong familiarity and research experience in some or all of the following fields: MEMS, NEMS, wearable devices, or soft lithography
- Hands-on experience in the following microfabrication processes: wafer cleaning, photolithography, metallization, dry/wet etching, electroplating and wire bonding
- Practical experience in device design (photomask design, process integration)
- Experience in optimization or failure analysis of fabrication process by electrical and mechanical inspection tools such as SEM, Step profiler, and Prober
- Prototyping experience such as CAD design, PCB design, and machining is preferred

Duration:
4-6 months