Associate Development Engineer (4758C) - EECS

higheredjobs.com/search/details.cfm

Type: Full-Time
Salary: $88,900 - $126,400 per hour
Posted: 36 days ago
Category: Laboratory and Research

Associate Development Engineer (4758C) - EECSAbout Berkeley

At the University of California, Berkeley, we are dedicated to fostering a community where everyone feels welcome and can thrive. Our culture of openness, freedom and belonging make it a special place for students, faculty and staff.

As a world-leading institution, Berkeley is known for its academic and research excellence, public mission, diverse student body, and commitment to equity and social justice. Since our founding in 1868, we have driven innovation, creating global intellectual, economic and social value.

We are looking for applicants who reflect California's diversity and want to be part of an inclusive, equity-focused community that views education as a matter of social justice. Please consider whether your values align with our Guiding Values and Principles, Principles of Community, and Strategic Plan.

At UC Berkeley, we believe that learning is a fundamental part of working, and provide space for supportive colleague communities via numerous employee resource groups (staff organizations). Our goal is for everyone on the Berkeley campus to feel supported and equipped to realize their full potential. We actively support this by providing all of our full-time staff employees with at least 80 hours (10 days) of paid time per year to engage in professional development activities. Find out more about how you can grow your career at UC Berkeley.

Departmental Overview

The Department of Electrical Engineering and Computer Sciences (EECS), in both the College of Engineering and the College of Computing, Data Science, and Society (CDSS) is the largest academic department on the Berkeley campus, consisting of over 130 faculty, active emeriti, professors-in-residence, and adjunct professors, 3600+ undergraduates in both Engineering and CDSS, 750+ graduate students, and 60+ staff. EECS programs are consistently ranked in the top

three by many measures, including U.S. News & World Report's national and global ranking. Annual operating budget (not including expenditures related to research. faculty start-ups, and student fellowships) for EECS is $40+ million.

The Department is actively engaged in teaching and research in the disciplines of Artificial Intelligence, Computational Biology, Databases, Graphics, Hardware / Architecture, Human-Computer Interaction, Operating Systems / Networking, Programming Systems / Software, Scientific Computing, Theory, Vision (in Computer Science) as well as Biosystems, Communication/Networking, Communications / Physical Layer, Control, Design, Modeling, and Analysis, Electromagnetics/Antennas, Integrated Circuits, Optics, Physical Electronics Devices, Physical Electronics/MEMS, Optoelectronics, Energy, Robotics, Signal Processing for Image & Video, Signal Processing for Speech & Audio (in Electrical Engineering). Computer Science operates research and instructional laboratories in Soda Hall, Sutardja Dai Hall, and other off-campus sites, and Electrical Engineering operates similar facilities in Cory Hall, Sutardja Dai Hall, and other off-campus sites. EECS also has a significant technical staff support structure to provide support for research and instructional laboratories and fabrication facilities.

The Associate Development Engineer provides professional engineering and technical support across all instructional labs within the Electrical Engineering and Computer Sciences department. Reporting to the Senior Development Engineer, this role supports a broad range of activities spanning electronics, controls, robotics, autonomous systems, and RF technologies.

Key responsibilities include designing, integrating, setting up, testing, and maintaining instructional and research-related equipment-ranging from electronic circuits, sensors, and RF systems to robotic and drone infrastructure, embedded platforms, and audio-visual technology. The position also provides guidance in developing experimental setups and maintaining lab spaces such as maker or prototyping areas.

This role requires strong hands-on ability in building and integrating systems-assembling testbeds, configuring embedded and RF hardware, developing control and communication software, and troubleshooting electromechanical and networked systems. Proficiency in electronics, RF instrumentation, microcontroller and embedded development tools, CAD design, and software integration (e.g., Python, ROS, or MATLAB/Simulink) is expected. The Associate Development Engineer collaborates closely with faculty, students, and staff to ensure the smooth operation of instructional labs and to enhance hands-on learning and experimentation in robotics, controls, RF, and autonomous systems.

Application Review Date

The First Review Date for this job is: November 27, 2025 - Open Until Filled

Responsibilities

- Provides full range of professional engineering services to research projects; meets with research staff in Provide high-level engineering and technical support across all instructional labs within the Electrical Engineering and Computer Sciences department. Collaborates with PI in the design, setup, testing, and maintenance of experimental systems and equipment used in labs covering basic electronics, controls, robotics, RF, and autonomous systems. Develops and integrates advanced technologies or methodologies (e.g., drone infrastructure, networked sensors, AI-enabled control, and communication systems) into instructional and research setups, ensuring safety, reliability, and compatibility.
- Supports and maintains electronic and audiovisual systems used in instructional and research environments, ensuring proper integration with lab instrumentation, computing, and control systems.
- Collaborate with faculty, students, and staff during the planning, design, and implementation phases of lab projects, ensuring alignment with instructional goals and learning outcomes. Develop and optimize firmware/software for microprocessors and embedded systems used in lab experiments, utilizing appropriate development tools and methodologies. Supports hardware-software integration for robotics, drones, and RF-based systems, ensuring interoperability across platforms. Facilitates collaboration across diverse disciplines (e.g., engineering, data science, biology, medicine) to address multifaceted or interdisciplinary projects.
- Provide technical guidance and training to students, faculty, and lab assistants on equipment operation, safety protocols, and best practices in experimental design and execution. Collaborate with the Senior Development Engineer and other stakeholders to assess and enhance lab infrastructure, equipment, and processes to support evolving educational needs and research initiatives. Assist in configuring and maintaining lab environments for hands-on experimentation in embedded systems, robotics, and wireless communication.
- Document project progress, outcomes, and technical specifications to maintain comprehensive records and facilitate project evaluation and replication. Monitor and evaluate lab equipment performance, identify issues, and implement timely solutions to ensure optimal functionality and reliability. Maintain documentation for integrated hardware-software systems, including electronics, communication links, and control interfaces.
- Participate in continuous improvement initiatives to enhance lab capabilities, efficiency, and effectiveness, contributing to the department's academic and research objectives. Stay updated on emerging technologies, trends, and advancements in engineering education and instructional methodologies relevant to the role. Evaluate new technologies in robotics, autonomous systems, and RF instrumentation for potential lab integration.

Required Qualifications

- Bachelor's degree in related area and / or equivalent experience / training.
- Proven experience in providing engineering and technical support within educational or research environments.

- Strong proficiency in using development tools for microprocessors (e.g., ARM, AVR, PIC, Intel), CAD tools (e.g., AutoCAD, SolidWorks), and other technologies relevant to electrical engineering, computer science, and autonomous or RF systems.
- Excellent problem-solving skills and ability to analyze complex technical issues, propose solutions, and implement effective resolutions.
- Effective communication and collaboration skills, with the ability to work closely with diverse stakeholders including faculty, students, and technical staff.
- Commitment to fostering a positive and supportive learning environment, promoting hands-on learning and experiential education.
- Prior experience with instructional labs covering electronics, controls, robotics, RF systems, or related disciplines is highly desirable.
- Ability to work in a collaborative manner; identify challenges and barriers and recommend resolutions.

Salary & Benefits
For information on the comprehensive benefits package offered by the University, please visit the University of California's Compensation & Benefits website.

Under California law, the University of California, Berkeley is required to provide a reasonable estimate of the compensation range for this role and should not offer a salary outside of the range posted in this job announcement. This range takes into account the wide range of factors that are considered in making compensation decisions including but not limited to experience, skills, knowledge, abilities, education, licensure and certifications, analysis of internal equity, and other business and organizational needs. It is not typical for an individual to be offered a salary at or near the top of the range for a position. Salary offers are determined based on final candidate qualifications and experience.

The budgeted salary or hourly range that the University reasonably expects to pay for this position is $88,900 to $126,400 yearly; the full salary range for this classification is $88,900 to $163,900 yearly. This is a 100% FTE career position eligible for full benefits. This position is FLSA Exempt and paid monthly.
Conviction History Background

This is a designated position requiring fingerprinting and a background check due to the nature of the job responsibilities. Berkeley does hire people with conviction histories and reviews information received in the context of the job responsibilities. The University reserves the right to make employment contingent upon successful completion of the background check.
Misconduct Disclosure

As a condition of employment, the final candidate who accepts a conditional offer of employment will be required to disclose if they have been subject to any final administrative or judicial decisions within the last seven years determining that they committed any misconduct; received notice of any allegations or are currently the subject of any administrative or disciplinary

proceedings involving misconduct; have left a position after receiving notice of allegations or while under investigation in an administrative or disciplinary proceeding involving misconduct; or have filed an appeal of a finding of misconduct with a previous employer.

"Misconduct" means any violation of the policies or laws governing conduct at the applicant's previous place of employment, including, but not limited to, violations of policies or laws prohibiting sexual harassment, sexual assault, or other forms of harassment, discrimination, dishonesty, or unethical conduct, as defined by the employer. For reference, below are UC's policies addressing some forms of misconduct:

UC Sexual Violence and Sexual Harassment Policy
UC Anti-Discrimination Policy
Abusive Conduct in the Workplace

Equal Employment Opportunity

The University of California is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status, or other protected status under state or federal law.

To apply, visit https://careerspub.universityofcalifornia.edu/psc/ucb/EMPLOYEE/HRMS/c/HRS_HRAM_FL.HRS_CG_SEARCH_FL.GBL?Page=HRS_APP_JBPST_FL&JobOpeningId=82525&PostingSeq=1&SiteId=21&languageCd=ENG&FOCUS=Applicant

jeid-892afbd13e133f4f8f5dd90776c16031