

Department/School Name: School of Engineering
Area of Specialization: Computer Engineering
Rank of Appointment: Assistant Professor, Tenure-Track position

**School of Engineering
College of Science and Engineering
San Francisco State University**

Position Title: Assistant Professor position in Computer Engineering, School of Engineering, College of Science and Engineering, San Francisco State University.

Start date: August 2023

Position Summary: The position is in the School of Engineering at San Francisco State University.

The School of Engineering (<https://engineering.sfsu.edu>) at San Francisco State University is the only four-year Engineering school in the city of San Francisco and has been a talent reservoir that serves a myriad of industries in the San Francisco Bay Area, in particular Silicon Valley, and throughout California. The School of Engineering offers four ABET-accredited undergraduate engineering programs: civil engineering, computer engineering, electrical engineering, and mechanical engineering, as well as three master's programs in civil engineering, electrical and computer engineering, and mechanical engineering. Together, these programs serve a highly diverse student body of 1,300 undergraduates and 80 graduate students, of which 42% are underrepresented minorities, 34% are first-generation students, and 18% are female students. The School of Engineering currently has 23 tenured/tenure-track faculty and more than 30 lecturer faculty. A new \$150M, state-of-the-art building (<https://catalyze.sfsu.edu/catalyze/science-engineering-innovation-center>) is being constructed and will be the new home of the School of Engineering with modernized engineering research and teaching labs beginning 2024.

The position is focused on the area of Computer Engineering or a closely related field. The scholarship may address a range of topics in any of these areas, including but not limited to: computer architecture, including energy efficient and/or high-performance computing systems; embedded systems; VLSI circuits and systems; reconfigurable computing; real-time operating systems (RTOS), including RTOS for robotics, automation; hardware and software for artificial intelligence and machine learning; and Internet-of-Things (IoT), including cyber-physical systems, IoT security and threat detection, and IoT for health, economic, and social equities; broad spectrum of computer hardware or software from system to physical layer.

The teaching assignments will be at the undergraduate and graduate levels. The position will include teaching and developing both lower division and upper division computer engineering core courses including both the lecture and laboratory, as well as graduate-level courses in the MS in Electrical and Computer Engineering program.

The position includes a full-time faculty workload per the Collective Bargaining Agreement between the California State University and the California Faculty Association. The workload primarily includes teaching or other agreed-upon primary assignments; conducting an active ongoing program of scholarship or creative works that advances knowledge in the field of one's specialty; and service contributions to the department, college, and the university.

Additional responsibilities include, but are not limited to, productive participation on departmental, college, and university-wide committees; mentoring and advising graduate and undergraduate

students; holding regular office hours; curriculum development and improvement, particularly with regard to student learning outcomes; and remaining current in both subject area and teaching methodologies.

Essential Job Tasks:

- Facilitate student success through teaching and advising with a focus on inclusive pedagogy;
- Develop course materials for undergraduate and graduate students on topics such as computer systems, digital systems design, computer networks, design with microcontrollers, embedded systems, computer architecture, VLSI, and computer programming that are linked to student learning outcomes;
- Evaluate and grade students' class work, assignments, papers, etc. in a timely manner;
- Compile, administer, and grade examinations or other learning assessments;
- Maintain student grades and other required records or reporting materials;
- Conduct research in one's field of interest and present findings in peer-reviewed journals, books, or professional conferences;
- Stay current on developments in the discipline;
- Plan, evaluate and revise curricula, course content, course materials, and methods of instruction;
- Hold regularly-scheduled office hours for the purpose of advising and assisting students;
- Actively participate on assigned committees in accordance with School or College needs, and SF State's strategic vision;
- Actively participate in collaborative interactions in fulfilling service assignments and other duties at the department, college, and university level;
- Stay current on and deploy the recent academic technologies as necessary for basic operations of courses;
- Supervise student laboratory work, advise professional student organizations, and/or mentor student teams participating in regional or national competitions.
- Additional duties as assigned