

Department/School Name: School of Engineering
Area of Specialization: Computer Engineering
Rank of Appointment: Assistant Professor, tenure track position

Position Description

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

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

Start date: August, 2022

Position Summary:

The position is in the School of Engineering at San Francisco State University (SF State).

SF State is a member of the California State University system and serves a diverse student body of 30,000 undergraduate and graduate students. The University seeks to promote appreciation of scholarship, freedom and, human diversity through excellence in instruction and intellectual accomplishment.

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 1,400 undergraduates and 80 graduate students, of which 38% are underrepresented minority and 18% female students. The School of Engineering currently has 22 tenured/tenure-track faculty and more than 30 lecturer faculty. A new \$150M, state-of-the-art building (<https://cpdc.sfsu.edu/science>) with currently in development 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. Strong candidates will be seriously considered regardless of area of specialization.

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 assignment; conducting an active ongoing program of scholarship 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 undergraduate and graduate students; holding regular office hours; curriculum development and improvement, particularly with regard to student learning outcomes; and remaining current in both engineering subject area and teaching methodologies.

Essential Job Tasks:

- Facilitate student success through teaching, research, and advising with a focus on inclusive pedagogy;
- Develop course materials for undergraduate and graduate students linked to student learning outcomes;
- Prepare and deliver effective lectures and laboratory sessions to undergraduate and graduate students;
- Conduct research in one's field of interest and present findings in peer-reviewed journals, books, or professional conferences;
- Actively search for external research funding, support, and collaborations from funding agencies and/or industry;
- Engage and advise undergraduate and graduate students in research;
- Stay current on developments in the discipline by reading new literature, talking with colleagues, and participating in professional conferences;
- Plan, evaluate and revise curricula, course content, course materials, laboratory experiments, 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 department or College needs, and SF State's strategic vision;
- Stay current on and deploy the recent academic technologies as necessary for basic operations of courses;
- Additional duties as assigned.