Careers at RFCUNY Job Openings

Job Title	Web Development Instructor
PVN ID	VR-2503-006770
Category	Instruction and Social Service
Location	OFFICE OF VC FOR RESEARCH
Department	CUNY Institute of Software Design & Deve
Status	Full Time
Annual Salary	\$105,000.00 - \$115,000.00
Hour(s) a Week	35
Closing Date	May 25, 2025 (Or Until Filled)

General Description

RESEARCH

FOUNDATION CUNY

About CUNY Tech Prep

In Fall 2015, the CUNY Institute for Software Design and Development, in collaboration with the <u>NYC Tech</u> <u>Talent Pipeline</u> (TTP), launched <u>CUNY Tech Prep</u> (CTP), a year-long training program to help CUNY undergraduate Computer Science students learn in-demand technologies, master professional soft skills, and land great tech jobs in NYC. Through a blend of classroom-based instruction, hands-on projects, and individualized career coaching, the program has since equipped over 1,000 students with in-demand skills and the resources they need to land paid internships and full-time employment upon completion of the program.

Ideal Candidate:

Is this you? The ideal candidate is someone passionate about learning new web frameworks, languages, and technologies. You are interested in bringing your industry experience and lessons learned into the classroom. And you are passionate about teaching and mentoring students starting their technical careers.

As part of the role you will be able to explore new technologies and determine when it is best to update, add to, or remove components of the existing web development curriculum. You can propose new technical and behavioral program modules to the program that serve the purpose of helping our students land internships and new grad roles in software engineering and data. And you will work with industry partners to stay up-to-date on the latest in technical hiring.

Job Description:

CUNY Tech Prep is looking for a full-time, hybrid Web Development Instructor. The role is primarily remote with some in person elements, including the possibility of teaching one in person class section in the NYC metropolitan area.

The Web Development Instructor will update, teach, and reimagine - based on their own knowledge and experience - our industry-informed technical curriculum built around small teams of students developing JavaScript full-stack applications. They will be responsible for troubleshooting and course-correcting the

existing curriculum as necessary in terms of both logistics and content; while the curriculum is already built out, they will have the opportunity to redesign it to best align with industry needs. The Web Development Instructor is responsible for successfully delivering this curriculum to the 2025-2026 and 2026-2027 cohorts. Throughout the two years, they will update and distribute skills-building assessments and additional training for students; assist student teams with designing and coding successful full-stack applications; and prepare each cohort to impress guests and employers alike during CTP's annual, in person Demo Night and Graduation events.

In addition to their work with students, the Web Development Instructor will collaborate with a variety of stakeholders, both technical and non technical, including: CTP and CUNY staff, program funders, and industry partners. They will, for example:

- Lead ~2 part time Web Development Instructors and ~4 part time Teacher Assistants to provide students with consistent lectures, labs, and supportive services. They must guide the teaching staff to keep all participatory students on track.
- Collaborate with their CTP teammates the Lead Instructor, the Career Coach team, Business Development Manager, Community Manager, and Program Director on team projects such as Demo Night, Graduation, our CTP summer hackathon, and reports to funders.
- Track and report on class and student progress to program funders at TTP.
- Make program and curriculum recommendations at the CUNY level to CUNY Computer Science and related staff.
- Prepare industry volunteers (guest lecturers, mock and candidate interviewers, including program alumni) to best work with students in and outside of class.

The Web Development Instructor reports to the Program Director and works closely with the Lead Instructor, who leads CTP's Data Science track.

Full time start date would be July 1, 2025 in alignment with the start of our new contract year, with the possibility and our preference of starting part time as early as April 2025 to onboard and get to know our program, students, and team.

Full-time start date and renewal of this position after June 30, 2027 are contingent upon the availability of funds.

Other Duties

Curriculum Design, Teaching, and Project Mentorship

- Evaluate, update, and redesign as seen fit CTP's Fall 2025 and Fall 2026 project-based curriculums teaching CUNY Computer Science students full-stack development on a JavaScript platform, with required pre-work over the summer and variations in curricula to accommodate less-experienced Computer Science students
- Evaluate, update, and redesign as seen fit CTP's Spring 2026 and Spring 2027 project-based curriculums teaching CUNY Computer Science students a mix of technical interviewing skills, as well as seminar type content on basic web security and continued web development and data science topics, in conjunction with CTP's Lead Instructor, who leads the Data Science track
- Respond to industry feedback on curriculum, as well as implement and advocate for changes to the CUNY Tech Prep curriculum to ensure students meet the technical demands of employers

- Lecture ~two classes/week, 2 ½ hours per class, to sections composed of up to ~30 students each, usually in the evenings from 6:30pm-9pm ET and Friday afternoons. Cover for other instructors as needed
- Oversee ~two part time Instructors and ~four Teacher Assistants and check in with them at least weekly to confirm student progress and address any students and/or projects which need troubleshooting or intervention
- Mentor student project teams in conjunction with Teacher Assistants, preparing students to demo their fullstack applications at Demo Night and Graduation events
- Hold virtual office hours each week of the fall and spring semesters
- · Complete mock technical interviews during office hours to help students prepare for interviews
- Prepare guest lecturers to lead class when we have in-class workshops (usually from industry partners), as needed

Summer Orientation and Prep Classes

- Collaborate with team on orientation and summer prep work, including in-person orientation sessions, usually in midtown Manhattan, in July, and virtual prep work sessions for students to learn JavaScript basics in July-August ahead of fall classes
- Evaluate, update, and redesign as seen fit CTP's summer prep curriculum to help students learn JavaScript and Python before fall courses begin, in conjunction with CTP's Lead Instructor

CTP Recruitment

- Co-lead creation and set up of HackerRank challenge (or equivalent) portion of CTP Recruitment process during the spring semester, including choosing appropriate HackerRank challenge and grading submitted tests or equivalent application pieces with the Lead Instructor and part time technical staff
- Complete interviews of prospective students
- Help team select students to accept for upcoming cohorts of CTP

Program Data Tracking, Reporting, and Documentation

- Track students' advancement through the technical curriculum by updating current and creating new skills-building assessments, gathering information from Instructors and Teacher Assistants, and providing additional teaching resources as needed
- Maintain up-to-date knowledge of individual students' technical competencies in a way that is readily available to funders at TTP and industry partners, when applicable
- Organize, analyze, and report on student progress to CTP program staff and attend weekly staff meetings
- Escalate concerns about student progress and program needs to the Program Director and team in a timely manner
- Update the CTP website, www.cunytechprep.org, on a rolling basis

Qualifications

Required Qualifications:

- Bachelor's or Master's/PhD in Computer Science (preferred) or related major
- Minimum of 3 years of work experience as a software engineer or full stack developer

- Strong command of JavaScript Full Stack development using React on the client-side and Node.js and Express.js on the server-side; building JSON API's; relational data modeling and use of ORM's (i.e. Sequelize, Prisma)
- Knowledge of SQL and NoSQL databases and their uses; deployment and hosting of Full Stack apps; building authentication and security considerations
- Working knowledge of build, development, and test tools such as: Git, GitHub, GitHub Actions, Vite, linters, test runners, etc.
- Strong knowledge of Data Structures and Algorithms (DSA), runtime and space complexity, and their use in the software engineering hiring process
- Strong proficiency in C++, Java, JavaScript including for the purposes of HackerRank/LeetCode style DSA problem solving and mock interviewing
- A language polyglot and lifelong learner excited to stay up to date on industry trends
- Experience teaching computer science and creating related curricula at the college level
- Knowledge of current employer demands for entry-level software engineers
- Experience completing technical interviews of candidates for software engineering roles
- Passion for working with students from diverse backgrounds and for training the next generation of NYC's top computer scientists
- Strong writing and communication skills, and ability to tailor communications to a variety of technical and nontechnical audiences
- A can-do mentality and willingness to take on additional responsibilities and tasks to continually improve the program
- Proven integrity when handling sensitive and personal student circumstances and information
- Experience and effectiveness collaborating with others in a remote setting, using platforms like Slack, Trello, Zoom, and Google Workspace products
- Ability to maintain a flexible schedule to accommodate student schedules and evening programming
- Reside in the New York City metropolitan area

Interested candidates should apply via RFCUNY with a resume and statement of interest.