

Job Title	Lab Instructor
PVN ID	VR-1707-001931
Category	Instruction and Social Service
Location	OFFICE OF VC FOR RESEARCH
Department	CISDD
Status	Part Time
Hourly Rate	\$27.50
Hour(s) a Week	5.50
Closing Date	Aug 31, 2017 (Or Until Filled)

General Description

Lab Instructors Needed for Fall Semester CUNY TECH PREP Program

Assignment reviews, technical interviewer, coding project guidance, salary: \$2420

About CUNY Tech Prep

[CUNY Tech Prep](#) is a yearlong program that provides exceptional computer science majors from 11 CUNY senior colleges with industry-informed full stack web application development training and professional development coaching.

Participants attend once-a-week fall semester classes covering covering topics in full stack web application development in JavaScript and participants work in small teams on projects. In addition, students work on technical job interview preparation through one-on-one mock interviews focusing on their Data Structures, Algorithms, and System Design knowledge. The 2017-18 program will equip approximately 110 undergraduate students with in-demand technical and professional skills and connections to paid technical internships or technical full-time employment. CUNY Tech Prep (CTP) is developed and delivered with the [NYC Tech Talent Pipeline](#) (NYTTP) and the [CUNY Institute for Software Design and Development](#) (CISDD). The NYTTP is a \$10 million industry partnership designed to support the growth of the City's tech sector and deliver quality jobs for New Yorkers and quality talent for New York's businesses.

Job Description:

CUNY Tech Prep is looking to fill up to 5 Lab instructor slots to support our instructors and students in reviewing programming assignments, providing guidance and code reviews of team projects, holding office hours with students, and providing mock technical interviews as needed. The ideal candidates have strong industry/start-up experience in developing full stack applications (preferably in JavaScript), and is familiar with

software engineering best practices and the technical interview process for software engineering jobs.

The Lab Instructor will guide a single weekly three-hour section of up to 25 students through development projects (a mix of individual and team-based) and in-class coding assignments. The Lab Instructor will offer design and coding advice, perform code-reviews, and reinforce the technical and professional “soft” skills required for both interviews and employment. Lab Instructors must hold in-person and virtual office hours for at least two hours per week to answer student questions and provide technical mentoring. Other responsibilities will include assessing and tracking student progress and handling light administrative duties.

Minimum compensation is \$2420 based on a 16-week spring semester and 5.5 hours per week.

Sections will likely meet on weekday evenings (Tuesday through Friday, 6 p.m. – 9 p.m.) and on Friday (12 p.m. to 3 p.m.) in the Penn Station and/or Grand Central area. Thus applicants *must specify what days and times they are available* so CUNY Tech Prep can match them to a single section. Please let us know if you wish to help run more than one section.

Other Duties

Core Responsibilities:

- Supporting a ~16-week (1 semester; late August to late December) project-based curriculum that teaches advanced computer science students full-stack web application development in JavaScript
- Attend weekly class meetings for assigned section. Review materials provided by instructor prior to class meetings.
- Meeting with students and assigned teams weekly for project mentoring, technical tutoring, and the facilitation of in-class assignments and project tasks
- Occasionally pair programming with students to debug projects and perform code reviews
- Holding office hours for students in-person and virtually
- Troubleshooting to keep students on-track and engaged and escalating concerns about student progress and needs to Instructors and program staff in a timely manner
- Assessing and reporting individual student progress and technical competencies, project status, class attendance, etc. via shared tools on a regular basis
- Assisting staff with technical events and workshops held throughout the semester

Qualifications

- Computer programming proficiency **required**
 - Demonstrated skills in JavaScript (**both** frontend and backend **preferred**)
 - Strong knowledge of data structures and algorithms and experience implementing them in Java or C/C++
 - Knowledge of full stack web application design, development, and industry best practices (application design, testing, securing applications, deployment, coding style guidelines, data modeling).
 - Implementation-level knowledge of one or more web frameworks (JavaScript-based preferred): Node.js+Express.js, Ruby on Rails, Django, Flask, Play Framework, etc.

- Knowledge of React preferred.
- Prior teaching and/or industry experience is preferred