Software Engineer Lead

highereedjobs.com/search/details.cfm

Type: Full-Time
Salary: $105,000 - $120,000 per year
Posted: 1 day ago
Application Due: 04/22/2026
Category: Software Engineer/Programmer

JOB OPENING ID: 275191

MODES OF WORK
Hybrid

REGULAR/TEMPORARY: Regular

ORGANIZATIONAL GROUP: Vp Acad Innovation

DEPARTMENT: Center for Academic Innovation

SALARY: $105,000.00 - $120,000.00

How to Apply

A cover letter and resume are important submissions for the hiring team to get a sense of your experience. In the cover letter, in two pages or less, please let us know how this role aligns with your career aspirations and skill set. Submit both a cover letter and resume as one file (because of system limitations).

Who We Are

Through curricular innovation, tools for student success, and educational research and analytics, the University of Michigan Center for Academic Innovation is building the future of education. Our vision is a future in which education connects and empowers learners everywhere to reach their full potential throughout their lives. To realize our vision, we make it our mission to collaborate across campus and around the world to create equitable, lifelong educational opportunities for learners everywhere.

About the Michigan Online Product Engineering Team

The Michigan Online Product Engineering team is a newly formed, dynamic group of developers, designers, testers, and product specialists at the heart of the Center for Academic Innovation. Our mission is to design, build, and scale the Michigan Online platform to serve 25 million learners worldwide. Organized into squads focused on Learner Innovation and Platform, we are responsible for the entire product lifecycle. We are a collaborative, agile team dedicated to creating a world-class, data-driven, and personalized destination for online education.

For more information, please visit our website: Academic Innovation.

Responsibilities*

Product Discovery and Engineering Excellence

- Partner in rapid product discovery through user research, prototyping, and experimentation to validate solutions that are feasible, usable, and valuable
- Write production-quality code in Python/Django and JavaScript/React/Vue while owning critical platform components (authentication, APIs, data pipelines, LMS integrations, payment integrations)
- Lead the design and deployment of scalable solutions that achieve measurable outcomes for millions of learners
- Collaborate with product and engineering leadership to research, explore, and evaluate opportunities for leveraging artificial intelligence in internal- and learner-facing products
- Define and apply technical standards and architectural patterns that enable rapid experimentation and continuous delivery
- Troubleshoot complex production issues when they impact learner outcomes
- Support cross-functional squads with primary focus on learner-facing experiences and innovative learning technologies

Technical and Strategic Leadership

- Mentor other engineers, providing guidance for architecture, code design, troubleshooting, and other software engineering activities
- Actively participate in code reviews, emphasizing best practices for software engineering
- Lead with context by sharing strategic vision while enabling autonomous technical decisions where applicable
- Bridge technical and product perspectives across Michigan Online squads
- Communicate key technical decisions to CAI leadership and other stakeholders and partners
- Evaluate emerging technologies and prototype solutions that unlock new possibilities for learners
- Build strong relationships across CAI and university partners based on trust and shared commitment to outcomes

What You'll Do

We are seeking a Software Engineer Lead to join our Product Engineering team and provide both technical and product leadership for the Michigan Online platform serving millions of global learners. This is a hands-on role where you will guide architecture decisions, mentor developers, and write production code while ensuring engineering practices scale to meet ambitious growth goals. You will lead the design and delivery of learner-facing experiences such as cohort tools, LMS integrations, and innovative learning technologies, taking ownership of outcomes rather than just code delivery. Working across our squad-based organization, you will help transform our engineering culture from one that waits for requirements to one that actively engages in discovery, ensuring we build solutions that truly make a difference for Michigan Online learners. This position will report to the Director of Product Engineering.

Required Qualifications*

- Bachelor's degree in Computer Science, Computer Engineering, a related field or an equivalent combination of education and relevant experience
- Minimum of 5 years of professional software engineering experience
- Enterprise development and production experience working with Python and the Django/Flask framework
- Production experience building and maintaining web applications at scale
- Strong technical leadership experience
- Experience mentoring technical personnel
- Full-stack development skills including:
    - Backend: REST APIs, microservices, database design
    - Frontend: Modern JavaScript frameworks (React, Vue.js, or Angular)
    - HTML5/CSS and responsive design principles

- Experience with relational databases (PostgreSQL, MySQL, MariaDB)
- Production deployment experience using cloud platforms and containerization
- Strong understanding of software development lifecycle and agile methodologies.
- Excellent analytical, problem-solving, and communication skills
- Attention to detail and commitment to code quality
- Ability to work well in a multicultural and collaborative environment

Modes of Work

The work requirements allow both onsite and offsite work and an employee has an expected recurring onsite presence. On occasion, the employee may be required and must be available to work onsite more frequently if necessitated by unit leadership or their designee and/or the job requirements.

Additional Information

Candidates must have legal authorization to work in the United States.

The mode of work for this position is **Hybrid** with a minimum of 4 days in the office per week, Monday through Thursday, with an option of remote work on Fridays. On occasion, you may be required and must be available to work onsite on Fridays if necessitated by our center's policy and domain leadership or by your job requirements.

The salary for this position will be based upon the selected candidate's education and experience.

Excellent benefits are available, for details, see http://benefits.umich.edu/

Salary Information

The general salary range for this position is $105,000 - $120,000. Candidates can expect to be paid a competitive and equitable salary. Factors used to determine salary include education level, experience, knowledge and skills for the position and salaries that are currently established within the unit. All candidates are encouraged to discuss salary questions to honor alignment and transparency throughout the recruiting process.

Organizational Statement on Harassment

We believe all individuals deserve to be treated with respect and dignity and have the right to work in a professional atmosphere that promotes mutual respect and a safe space for collaboration. Any concerns shared with any staff members and student employees in the Center for Academic Innovation will be reported to the Equity, Civil Rights, & Title IX Office to be reviewed and addressed, and the Center for Academic Innovation encourages reporting of any forms of harassment including sexual and gender-based harassment.

Background Screening

The University of Michigan conducts background checks on all job candidates upon acceptance of a contingent offer and may use a third party administrator to conduct background checks. Background checks will be performed in compliance with the Fair Credit Reporting Act.

Application Deadline

Job openings are posted for a minimum of seven calendar days. This job may be removed from posting boards and filled anytime after the minimum posting period has ended.

Decision Making Process

Applications will be reviewed as received throughout the posting period and continue until the position is filled.

U-M EEO Statement

The University of Michigan is an equal employment opportunity employer.

The University of Michigan is a non-discriminatory/affirmative action employer.