

# DYLAN WANG

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## Education

### University of Massachusetts Amherst

Expected: May 2026

Bachelor of Science in Computer Engineering — Minor Engineering Management

Amherst, MA

- Relevant Coursework: Data Structures & Algorithms, Object Oriented Programming, Computer Networking, Probability & Statistics, Discrete Math, Linear Algebra
- Leadership: Vice President of Lettuce Club, Resident Assistant

## Technical Skills

**Languages:** Python, Java, TypeScript, JavaScript, C, SQL, HTML5, CSS

**Developer Tools:** AWS, Kubernetes, EKS, Docker, Jenkins, Maven, Git, VSCode, Jira, Insomnia, Redis, JWT, JUnit, Splunk, Snowflake, PowerBI, Unify

**Libraries/Frameworks:** Spring Boot, Angular, React, Next.js, Flask, Node.js, PostgreSQL, OracleDB

**Certifications:** AWS Certified Cloud Practitioner, Meta Introduction to Back-end Development

## Work Experience

### Fidelity Investments

June 2025 – Aug. 2025

Software Engineer Intern

Merrimack, NH

- Engineered, tested with **JUnit**, and deployed a full-stack Core Metadata application to production, enabling **15+** teams to manage API metadata for **1000+** microservices and integrating **Redis** caching to cut pagination lookup time by **30%**.
- Developed an API Reporting Tool to extract usage metrics from **Splunk** for Tomcat/WSO2 APIs, feeding data into **Snowflake** and visualized via **PowerBI** dashboards used across **4 teams**.
- Implemented Open Policy Agent enforcement across multiple **Kubernetes** deployed applications on **Amazon EKS**, integrating automated security policy checks within **Jenkins CI/CD** pipelines, reducing security risks found through penetration testing.

### University of Massachusetts Lowell

July 2024 – Aug. 2024

Machine Learning Research Intern

Lowell, MA

- Built a custom PyTorch dataset class with automated mask generation and advanced augmentations, reducing preprocessing errors by **45%** and generating **1,000+** segmentation masks for endoscopy classification.
- Optimized data preparation pipeline by filtering **50+** irrelevant endoscopy images and implementing an 80 to 20 train/test split, boosting model accuracy by **30%** and increasing training throughput by **15%** for medical imaging applications.

### Charm Sciences

June 2022 – Sep. 2022

Software Engineer Intern

Andover, MA

- Wrote **Python test scripts** to validate ROSA incubators and digital dry block incubators, reducing manual testing time by **85%** and ensuring consistent QA across **500+** hardware units.

## Projects

### Chief Technology Officer (CTO) | Teach and Serve

React | Spring Boot | PostgreSQL

- Drove **100% of technical implementation** of a mentorship platform to help high school students in underserved areas receive support and guidance. Currently in pre-launch with **500+** interested users.
- Integrated critical systems including interest-based matching using **embedding vectors** for personalized recommendations, **JWT authentication**, role-based dashboards, and global threads, which directly contributed to a scalable and secure user experience across the platform.

### Lightbulb | [uselightbulb.vercel.app](https://uselightbulb.vercel.app)

Next.js | Python | Flask

- Developed and deployed an AI-powered full-stack app using **Next.js/Flask** while leveraging **Llama 3.3** to generate personalized coding project ideas for **100+** users.
- Achieved **95%** uptime while reducing backend latency by **90% (60s to 5s)** by optimizing cold start delays using **cronjobs on Render** and implementing **CI/CD pipelines** with automated testing through Github Actions.

### Valorant Champions Tour Data Visualizer | [Github Repository](#)

Next.js | Spring Boot | PostgreSQL

- Designed a **Dockerized VCT** application leveraging **Next.js** and **Spring Boot on AWS EC2** and integrated an optimized **PostgreSQL** schema hosted on **Supabase** with indexing, improving query performance by **60%** across **5,000+** Valorant match records.