

# ZHAO YU LIN

(917) 498-0423 · zhaoyu0305@gmail.com · U.S. Citizen · linkedin · github.com/ZhaoYuLL · NY

## EDUCATION

---

### Stevens Institute of Technology

*Bachelor of Science in Computer Science (GPA: 3.80/4.00)*

*Expected May 2026*

**Coursework:** Data Structures, Algorithms, Web Development, Database Management, Agile Methodologies, Discrete Structures, Computer Architecture, Systems Programming, Operating Systems, Linear Algebra, Statistics

## EXPERIENCE

---

### unRetire - *Software Engineer*

Aug 2024 - Present

- Spearheading the development of a job board app for recent retirees using **React Native, MongoDB, and AWS**
- Reduced app load times by **40%** through improved database parsing with query caching and connection pooling

### eBay - *Research Assistant*

December 2023 - May 2024

- Developed innovative e-commerce recommendation system using few-shot adaptation and adversarial learning in PyTorch, incorporating demographic and product-specific invariances to boost SEO recommendation accuracy
- Created interactive **React/D3.js** dashboard visualizing user metrics like query sequences and product interactions
- Leveraged Apache Spark to optimize processing of **26M+** user queries, increasing model training speed by **10%**

### Google - *Software Engineer Fellow*

March 2022 - June 2022

- Built a **posture detection program** with **TensorFlow machine learning** to detect back issues from remote work
- Achieved **92%** precision and **89%** recall on **50,000+** images by optimizing the model with cosine similarity
- Integrated the posture detection functionality into a **full-stack website** using **React, Python, and Flask**
- Used MongoDB for user preferences, employing flexible schema for decreasing query response times by **20%**

### Carnegie Mellon University - *Research Assistant*

January 2022 - June 2022

- Deployed a trajectory **optimization algorithm using PyTorch** and sci-kit that enhanced autonomous vehicle safety
- Raised lane change detection accuracy by over **33%** by leveraging the safety constraints in road test simulations

### Robotics For All - *Technology Development Intern*

January 2021 - June 2022

- Designed and delivered comprehensive **Python** and **Java** curriculum to **100+** students using Tkinter and Swing
- Boosted partnerships with schools by **10%** by using **Python and API calls** to automate the outreach system

## LEADERSHIP

---

### Stevens Blueprint Club - *Website Lead*

May 2024 - Present

- Drove cross-functional outcomes with **15+** UX designers and web developers to redesign our website, creating a consistent and scalable user experience across web and mobile, which improved brand visibility
- Reduced website load time by **20%** through image optimization, efficient code splitting, and lazy loading

### Ethnic Student Council - *Secretary*

April 2023 - May 2024

- Expanded the ethnic student body by over **200%** from last year by organizing events with **20+** cultural clubs

## PROJECTS

---

### Birdle | *React, Express, Node.js, PostgreSQL, GraphQL, Tailwind, Typescript, Jest*

*Aug 2024 - Sep 2024*

- Implemented an interactive and educational web game where users can guess bird species based on their songs
- Streamlined data retrieval with GraphQL, cutting API requests by **30%** and enhanced app response time by **25%**

### Digi-Drobe | *Express, Node.js, AJAX, JQuery, MongoDB, AWS, Handlebars, JavaScript*

*Dec 2023 - May 2024*

- Engineered a full stack social media web application facilitating outfit uploads and mix-and-match capabilities
- Reduced upload times by **30%** through optimized file handling with **S3 uploads** and **MongoDB** metadata storage

## SKILLS

---

**Languages:** Java, Python, C, C++, JavaScript, HTML, CSS, SQL

**Technologies:** React, TypeScript, Tailwind, Node.js, Next.js, Django, MongoDB, PostgreSQL, Linux, Git, Docker

**Concepts:** Scrum, REST API, Unit Testing, System Design, Distributed Systems, Frontend, Backend, Full-stack, Software Engineering, Software Development, Software QA & Testing, Embedded Engineering, Object Oriented Development, Networking, DevOps, System Design, CI/CD, Data Analysis, Machine Learning