

# Gordon Stein

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## Summary

Frontend Software Engineer with a strong background in creating user interfaces and AI assistant systems. Developed educational technologies and web-based applications using JavaScript, HTML, CSS, and modern frameworks. Eager to apply expertise in AI integration and collaborative design to enhance accessibility and user experience for Firefox.

## Skills

- **Programming Languages:** C, C#, JavaScript/Node, Python, Rust, C++, Java, PHP, SQL, TypeScript, HTML5
- **Technologies & Tools:** AI/ML, Arduino, AR/VR/MR, AWS, CSS, Docker, Git, LangChain, Large Language Models, Linux, Keras, MongoDB, MySQL, NoSQL, OpenCV, OpenAI API, Prompt Engineering, React, SQLite, Svelte, TEX, Unity

## Work Experience

### Vanderbilt University

2024 - Present

#### POSTDOCTORAL SCHOLAR, LIVE INITIATIVE

- Engineered an educational game featuring a Svelte frontend, Rust API backend, and Postgres database, emphasizing accessible UI design for elementary students.
- Crafted age-appropriate interfaces enabling students to train machine learning models, integrating front-end technologies such as HTML5, CSS, and JavaScript.
- Trained and evaluated custom language models using PyTorch, fine-tuning through Unsloth for educational applications in AI ethics.
- Conceptualized and launched new initiatives on Large Language Models in education and philosophy, with an emphasis on AI ethics.
- Developed an agent-based AI assistant system for novice coders within a visual, block-based programming environment.
- Collaborated with multidisciplinary teams to drive innovation and refine AI-powered applications, contributing to rapid continuous deployment via GitHub Actions.

### Lawrence Technological University

2016 - 2018

#### SENIOR LECTURER

- Delivered diverse Computer Science curriculum including C++ and Data Structures, fostering hands-on problem solving among students.
- Revamped and developed course materials for introductory Computer Science courses, enhancing student engagement and comprehension.
- Designed courses on emerging technologies such as Virtual Reality with Unity and Cybersecurity, promoting collaborative learning and industry-relevant skills.

### Robofest

2010 - 2016

#### SYSTEM ADMINISTRATOR

- Migrated dedicated server to AWS cloud infrastructure
- Replaced static HTML content with dynamic content management system
- Provided maintenance for Linux-based server hosted on AWS EC2
- Collaborated with other developers on a Java codebase using a Git repository
- Documented existing code to ease future development
- Assisted with robotics research and testing emerging technologies

### Art/Design Group, Ltd.

2013 - 2016

#### SOFTWARE ARCHITECT

- Developed a complex web-based application for financial management firm, allowing firm's employees to manage accounts, automatically determine asset allocations using an expert system, and generate customized report PDF for clients
- Integrated PHP front-end code with Java-based document generation system and MySQL database
- Deployed software to Linux-based EC2 server and Git repository

## Education

### Vanderbilt University

Sep 2018 - May 2024

#### DOCTOR OF PHILOSOPHY, Computer Science

- **Achievements:** Advisor: Akos Ledeczki, Dissertation: A Novice-Friendly Networked Educational Robotics Simulation

### Lawrence Technological University

Aug 2012 - May 2016

#### MASTER OF SCIENCE, Computer Science

- **GPA:** 4.0
- **Coursework:** Cryptography, Reuse based web development, Social Network Mining, Computing in the Digital Humanities

### Lawrence Technological University

Aug 2012 - May 2016

#### BACHELOR OF SCIENCE, Computer Science

- **GPA:** 3.90
- **Achievements:** summa cum laude