Liam Stamper

Full-Stack Developer, Iowa City, IA

SKILLS

BACKEND DEVELOPMENT - Nest.js, Node.js, Express.js, Python, FastApi, Django, Flask, Java
FRONTEND DEVELOPMENT - React, TypeScript, JavaScript, Redux, HTML/CSS, TailwindCSS, Material UI, Bootstrap
MISCELLANEOUS – GitHub Actions, Next.js, PostgreSQL, MongoDB, MySQL, Pandas, Docker
SOFT SKILLS – Communication, Team Collaboration, Attention to Detail, Time Management

EXPERIENCE

The University of Iowa | Python, OpenCV, TypeScript, MySQL, FastApi
Research Assistant | Jan 2024 - Present, Iowa City, IA
- Developed advanced cell segmentation tools using PyTorch and OpenCV to accurately classify cells within bone marrow scans
- Engineered a custom visualization tool using Typescript, React and FastAPI
- Collaborated with cross-functional teams to ensure data accuracy and improved system performance by 20%

SeatStock | TypeScript, React, Next.js, Django, PostgreSQL, Docker
Full-Stack Developer and Co-Founder | Aug 2023 - Dec 2023, Iowa City, IA
- Built a scalable, real-time student ticketing platform using TypeScript, React and Next.js with a Django backend and PostgreSQL database
- Assisted in integration of the platform's backend Django APIs to handle inventory management and payment processing
- Implemented Docker containerization to streamline the development and deployment process, reducing setup time by 30%

Quality Manufacturing Corporation | JavaScript, HTML/CSS, AJAX, MySQL
Web Development Intern **|** May 2022- July 2022, West Des Moines, IA
- Developed and deployed dynamic internal form components, improving data input efficiency, and reducing part request latency by 25%
- Developed strong skills in debugging, troubleshooting, and efficiently resolving issues to ensure smooth project progress

PERSONAL PROJECTS

NextFileManager | TypeScript, React, Python, FastApi, TailwindCSS File
Server Application Supporting OIDC & LDAP
- Engineered a robust file management application using TypeScript and FastAPI, designed to handle high-performance operations with command line integration for developers
- Implemented authentication protocols with OpenID Connect (OIDC) and Lightweight Directory Access Protocol (LDAP), significantly enhancing system security and user data privacy

Quizly | React, TypeScript, FastApi, Redis, TailwindCSS
AI-Powered Real-Time Quiz Platform (2nd Place Winner, Iowa State Hackathon)
- Designed and built an interactive quiz game in 24 hours, integrating Meta's Llama model to dynamically generate questions and provide real-time feedback
- Implemented robust WebSocket-based communication with FastAPI to enable seamless interaction between hosts and players
- Engineered a responsive, user-friendly frontend using React, TypeScript, and TailwindCSS, ensuring cross-device compatibility
- Leveraged Redis for high-speed data caching and session management, supporting scalability for future updates

CONTACT INFORMATION

Email - liam.stamper@gmail.com
Portfolio – liamstamper.vercel.app
GitHub - github.com/liamstamper
LinkedIn - linkedin.com/in/liamstamper

EDUCATION

The University of Iowa
B.A. in Computer Science
Aug 2021 - Dec 2024, Iowa City, IA
Minor in Mathematics, Honors Program

ACTIVITIES & AWARDS

Event Chair for ACM (2024)
Organized tech talks, coding challenges, and networking events for 50+ members, fostering community engagement.

2nd Place at Iowa State's Hackathon (2024)
Built Quizly as a 2-person team in 24hrs.

Iowa Hackathon Award Winner (2023)

COURSEWORK

Data Structures and Algorithms
Introduction to Software Development
Mathematics of Machine Learning
Discrete Structures
Computer Organization
Introduction to Networks
Calculus I-III
Linear Algebra
Numerical Methods

OTHER INTERESTS

Open-Source Contribution
Image Processing (OpenCV, Scikit-Image) Network Protocols
Machine Learning (Jax, Pytorch, TensorFlow)
Hardware Projects (Arduino)
Data Visualization