James Gasek

Hudson, Massachusetts

github.com/jamesgasek

Education

Lehigh University 3.7

Aug. 2020 - Dec 2023

Bachelor of Science in Computer Science and Business, Data Science

Bethlehem, PA

Relevant Coursework

• Blockchain Algorithms

- Systems Software
- Software Engineering
- Computer Architectures
- Structures Algorithms
- Web Systems
- Database Systems
- Finance
- Managerial Accounting
- Financial Accounting
- Economics
- Organizational Behavior

Experience

Amazon Robotics

Software Engineer Intern

Jun 2023 - Aug 2023

North Reading, MA

• Developed serverless dashboard for viewing results of systems testing as part of the QA Automation team.

- Frontend application written in TypeScript as React single page application hosted from an S3 bucket.
- Backend infrastructure and CI/CD modeled using using AWS Cloud Development Kit with TypeScript to allow version-controlled infrastructure and rapid deployment and iteration.
- Developed proficiency in AWS, using API Gateway to route Sigv4 signed requests, Python Lambdas to access test logs, S3 to store and organize test logs, Route53 for DNS configuration, and IAM to restrict access to Quality Assurance Engineers and allow cross-account resource access.
- Completed project weeks ahead of schedule and was able to iterate on design and tailor product to end users.

Structural Services

Dec 2021 - May 2023

Software Engineer

Bethlehem, PA

- Lead developer of device interaction software for an AI-powered assistive system for the construction industry.
- Created multithreaded C++ programs to read, encode, process, and display camera and other sensor data wirelessly.
- Integrated 3rd party device interaction libraries for Basler and JAI Gig-E computer vision cameras, an SBG Systems Inertial Measurement Unit and GPS, and Micro-Epsilon Lidar systems, among other devices.
- Researched GPS technology and wrote software enabling centimeter accurate GPS tracking using real-time kinematic positioning (RTK) and a cellular connection to receive atmospheric corrections.
- Working in a fast-paced, highly-motivated startup environment, in constant communication with other team members. Adapting to constantly evolving designs, unexpected obstacles, and ambitious timelines.
- Used CMake to optimize building process and manage C/C++ libraries.

Streamlined Tech

Jun 2021 - Jan 2022

Frontend Engineer & UI/UX Intern

Remote

- Assisted in development of React full-stack, single-page HR management web app with other Lehigh students, actively used by dozens of clients and thousands of employees.
- Implemented password encryption logic, registration logic, and other interactions with PostreSQL database.

Projects

Loupt | React, AWS, MongoDB, Node.js

July 2023

• Lead developer of a Crowdfunding social media platform looking to disrupt the securities-based crowdfunding space.

Lehigh Course Management Board | TypeScript, Vue.is, Firebase, Google Cloud Console

January 2021

- Assisted creation of a Kanban-inspired drag and drop schedule planner for fellow CSB students at Lehigh.
- Complete google OAuth with firebase integration to keep track of user's course plans.

Eagle Scout | Community Service

September 2019

Led and coordinated volunteers to build community-funded sitting benches outside of the local Hudson Food Pantry.

Technical Skills

Languages (Most experience first): C++, C, TypeScript, JavaScript, Python, Java, HTML/CSS, Swift/UIKit, Rust Developer Tools: AWS, Firebase, MongoDB Atlas, XCode, Docker, Maven, Oracle SQL Developer Technologies/Frameworks: Linux, Git, React, Node.js, AWS CDK, Oracle MySQL, CMake, Boost, DNS