JAMES GASEK

Boston, MA

📞 978-333-1858 ✉ james@gasek.net in linkedin.com/in/devjamesgasek � github.com/jamesgasek

Education

Lehigh University	**Aug. 2020 – Dec. 2023**
B.S., Computer Science and Business, Data Science (Completed Early)	*Bethlehem, PA*
Advanced Math and Science Academy Charter School	*Marlborough, MA*

Experience

Amazon Robotics　　　　　　　　　　　　　　　　　　　　　　　　　　　**Dec. 2024 – Present**
Software Engineer, Robotic Sortation Technology - ML / Optimization　　　　　　　　*North Reading, MA*

- Developed microservices to plan robotic movements using Go, Kotlin, and Scala on serverless AWS infrastructure, adhering to strict standards for monitoring, testing, and uptime across Amazon's global network of fulfillment centers
- Led the implementation of a real-time data collection, aggregation, and inference pipeline and optimization framework predicting and acting on internal fulfillment center inefficiencies with millions in projected annual savings
- Implemented a new data fetching workflow for an internal fulfillment center dashboard project, reducing feature development time by over 60% and doubling the number of features shipped per sprint
- Conceptualized, planned, and implemented a Slack-based AI agent to recommend actions for associates using Bedrock

Amazon Robotics　　　　　　　　　　　　　　　　　　　　　　　　　　　　　**Summer 2023**
Software Engineer Intern, QA Automation　　　　　　　　　　　　　　　　　　　*North Reading, MA*

- Developed serverless React application for viewing results of systems testing as part of the QA Automation team, using AWS CDK "Infrastructure as Code" framework for infrastructure and CI/CD
- Completed project two weeks ahead of schedule and tailored the product more closely to suit end-user needs

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
- 10x-ed wireless image transmission data throughput by utilizing SIMD for real-time data compression and transmission
- Developed C++ interfaces for CV cameras, SBG Systems IMU/GPS, and Micro-Epsilon LiDAR, enabling centimeter-accurate GPS tracking using RTK positioning

Projects

Loupt | *Next.js, TypeScript, PostgreSQL* | loupt.co　　　　　　　　　　　　　　**2023 – 2025**

- Technical Co-Founder of a regulation crowdfunding platform aimed to democratize access to investment opportunities
- Designed and deployed Node.js services and Next.js web application with PostgreSQL on ECS with AWS services
- Integrated third-party APIs for investor KYC/AML, payment processing, and marketing automation
- Led development team and worked closely with institutional investors and stakeholders

Newton Notes | *SwiftUI* | gasek.net/newtonnotes　　　　　　　　　　　　　　　　**2024**

- Developed a minimalist, privacy-focused gym workout tracking application using pure SwiftUI
- Implemented a clean, intuitive interface prioritizing simplicity and user privacy
- Created as a free, open-source alternative to complex fitness tracking applications

CV Hazard Detection Model | *Python, OpenCV, Keras, AWS SageMaker* | Lehigh Capstone - Fall 2023　　**2023**

- Fine-tuned object detection model to improve performance of off-the-shelf models by 100x for autonomous cyclist assistance device with Bethlehem-based startup, Skillion
- Used publicly available datasets including KITTI, Norwegian University of Science and Technology, and manually collected data labeled with in-house Python labeling program from Tesla Model S onboard camera

Technical Skills - Most Experience First

Languages: C++, TypeScript/JavaScript, C, Kotlin, Java, Python, Go, HTML/CSS, Shell, Swift/SwiftUI, Rust, Scala
Frameworks/Technologies: AWS CDK, Next.js, OpenSearch, React, PostgreSQL, Bedrock, Node.js, Docker, GCP
Developer Tools:AWS, pgAdmin, Railway, Figma, Linux, CMake, Firebase, Xcode, Github Actions, LLMs