JAMES GASEK

Boston, MA

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

Education

Lehigh University — **Aug. 2020 – Dec. 2023**
Bachelor of Science in Computer Science and Business, Data Science (Completed Early) — *Bethlehem, PA*

Advanced Math and Science Academy Charter School — **Aug. 2016 – May 2020**
High School — *Marlborough, MA*

Experience

Amazon Robotics — **Dec. 2024 – Present**
Software Engineer, Robotic Sortation Technology — *North Reading, MA*
- Developing next-generation robotic sortation systems for Amazon's worldwide fulfillment center network
- Building robust microservices using Java, Kotlin, and Scala on AWS CDK infrastructure
- Implementing React dashboards for Outbound Dock Automation project, scheduled for Q2 2025 deployment
- Maintaining and migrating existing services for sortation systems processing and tracking millions of packages daily

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
- Modeled infrastructure and CI/CD using AWS Cloud Development Kit (CDK) in TypeScript to allow version-controlled infrastructure and rapid deployment
- Implemented several AWS services, including API Gateway to route SigV4 signed requests, Python Lambdas to access test logs, S3 to store and organize test logs
- Completed project two weeks ahead of schedule and tailored the product more closely to 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
- Created multithreaded C++ programs to read, encode, process, and display camera and other sensor data wirelessly
- Developed driver libraries for devices such as CV cameras, an SBG Systems IMU/GPS, and Micro-Epsilon LiDAR
- Researched GPS technology and wrote software enabling centimeter-accurate GPS tracking using RTK positioning

Projects

Loupt | *Next.js, TypeScript, PostgreSQL* | loupt.co — **2023 – Present**
- 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 – Present**
- 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 dramatically increase performance of off-the-shelf models 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
- Achieved over 200x improvement in performance on nighttime headlight-facing captures

Technical Skills - Most Experience First

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