Jonah Cole Biedermann

Portland, OR / Willing to Relocate| biedermjcareers@gmail.com | jonahportfolio.com |
linkedin.com/in/jonah-biedermann/ | 503-915-3843

Work Experience

Software Engineer, United States Air Force Jul 2024 – Apr 2025

- Led development of mission-critical flight software for E-3 AWACS systems using Python, C++ and Java, ensuring optimal weapon system performance.

Software Engineer, Oregon Country Fair, Remote, OR Jan 2024 – Jun 2024

- Developed and maintained a membership database application using Django framework, creating a new MariaDB database using Docker and Kubernetes to manage memberships.
- Designed and tested a RESTful API using Postman, achieving 100% endpoint reliability for 500+ monthly users.

Software Engineer Intern, Daimler Trucks North America, Portland, OR Jun 2023 – Dec 2023

- Developed a full-stack CRUD application (Visual Studio, SQL) to streamline management of service repair data, improving diagnostic support efficiency as well as gaining exposure to vehicle ECU architecture.
- Mitigated data loss risks through the development of an application for automated database backups using Powershell and SQL Server.
- Integrated third-party APIs (e.g., Twilio) into internal applications (Uptime-Pro) to enhance notification functionality.
- Utilized Git for version control and collaborated within the firmware development team, gaining exposure to team coordination practices using tools like Jira and Confluence.

Software Engineer Intern, Mosaic.Tech, Remote, OR Mar 2022 – Sep 2022

- Designed and deployed scalable microservices using AWS (Lambda, API Gateway, DynamoDB) handling high-volume data streams relevant to large asset metadata, achieving sub-second latency under load.
- Integrated Snowflake Data Warehouse (handling over 50TB) with OAuth using Angular/TypeScript, enabling secure, high-performance data analysis critical for platform insights.
- Implemented CI/CD pipelines (Jenkins) and automated testing, increasing deployment frequency by 3x and improving overall code quality metrics.

Embedded Software Engineer, Open Source Environmental Sensing Lab, Corvallis, OR Jan 2021 – Jun 2021

- Led project coordination and developed C++ firmware for embedded systems (Arduino Feather M0), handling real-time sensor data acquisition/processing and designing low-level communication protocols (SPI, I2C).
- Built an audio-visualization system tailored for MongoDB data, achieving a significant improvement in data comprehension and analysis for users.

Projects

Anomaly Detection Android Application for Construction Use Case Sep 2022 – Jun 2023

- Designed and implemented a mobile solution utilizing deep learning (YOLOv5, masked autoencoders) for high-accuracy (95%) anomaly detection in welding images, showcasing complex problem-solving skills.

Education

Oregon State University
Bachelor of Science in Computer Science GPA: 3.83/4.00
Coursework: Artificial Intelligence, Machine Learning, Web Development, Mobile Development, Cybersecurity

Skills

Languages: Python, JavaScript/TypeScript, SQL, Java, C++, Bash/Powershell, Linux/Unix Systems,
Frameworks: Django, Spring Boot, React.js, Angular, Kotlin, AWS (Lambda, DynamoDB), Azure, Docker / Kubernetes