RYAN DALBY

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Seattle, WA

EXPERIENCE

Amazon Web Services December 2024 - Present
Software Dev Engineer II *Seattle, Washington*

· Led application-level updates to support a major improvement to AWS Supply Chain onboarding experience, reducing the time for new customers to access the system from over 30 minutes to under 3 minutes.

Amazon Web Services October 2022 - December 2024
Software Dev Engineer *Denver, Colorado and Seattle, Washington*

· Designed, built, and operated scalable AWS services, contributing end-to-end to core AWS Supply Chain systems, including launching new product features, public APIs, and operating a high availability AWS tier-1 service.
· Contributed to infrastructure and application development across multiple technologies, working with TypeScript-based AWS CDK for infrastructure, Kotlin/Java for application logic, and React for frontend components.
· Improved platform reliability and automation, streamlining deployments, enhancing security compliance, and optimizing system operations with limited resources.
· Contributed beyond core development by mentoring peers, providing architectural guidance, and actively supporting organization-wide initiatives.

Seagate Technology June 2022 - August 2022
Engineer II- Robotics Software *Longmont, Colorado*

· Supported the C#/.NET software of a robotic manufacturing tool. Used Hierarchical State Machine based software framework, finished backlog tasks, tested changes on hardware, and released software to production.
· Reduced unnecessary robotic teach-time by implementing a new recipe management system. Interfaced with various internal database systems with limited documentation by successfully networking across multiple teams. This reduced teach-time by up to 10 times per tool when a new product is introduced.
· Introduced modern version control practices to existing robotic software by making the software Git-friendly and implementing Gitflow to improve development speed and encourage collaboration. Added effective, previously non-existent documentation to assist future developers onboard for robotic tool development.

Blyncsy Inc. Jan 2022 - May 2022
Deep Learning Intern *Salt Lake City, Utah*

· Developed a deep learning-based road crack detection pipeline for real-time geospatial mapping during a graduate internship, leveraging Python, computer vision, and state-of-the-art models. Earned a Graduate Certificate in Deep Learning from the University of Utah.

Seagate Technology May 2020 - December 2020 and May 2021 - August 2021
Summer Intern- Robotics Software Engineer *Longmont, Colorado*

· Integrated production robotic tool software with a unifying C#/.NET software system by porting robot I/O and kinematics, reducing operational and development burden. Developed machine learning models for defect detection and predictive maintenance, integrated ML.NET for model deployment, and facilitated global collaboration.

Code Corporation May 2019 - August 2019
Mechanical Engineer Intern *Draper, Utah*

· Applied iterative engineering design using SOLIDWORKS and rapid prototyping to develop cost-efficient products, streamline manufacturing through engineering change orders, and enhance designs via product testing and agile project management.

TECHNICAL STRENGTHS

Programming Languages
· Most experienced with Kotlin/Java and Typescript/Javascript.
· Experienced with C# and Python.
· Some experience with C++/C, MATLAB.

APIs & Tools
· Most experienced with Kotlin/Java application programming, Infrastructure as Code (IaC) through Typescript-based AWS CDK, AWS services such as AWS DynamoDB, Lambda, StepFunctions, EC2/ECS/Fargate, S3, KMS, IAM, CloudWatch, etc., and Typescript-based React with GraphQL.
· Experienced with .NET, Git, Unix (Bash), scientific Python tools such as Numpy, Pandas, Scipy, SciKit, PyTorch, etc.
· Some experience with the ROS, Three.js, Jira (Scrum), LaTeX, Docker, and SOLIDWORKS (CSWA certified).

EDUCATION

University of Utah College of Engineering May 2022
Master of Science in Mechanical Engineering, Robotics Track *Overall GPA: 3.963*

University of Utah College of Engineering May 2022
Bachelor of Science in Mechanical Engineering, Minor in Computer Science *Overall GPA: 3.897*

RELEVANT COURSEWORK

Graduate Coursework Deep Learning, Machine Learning, Artificial Intelligence, Deep Learning Capstone, Image Processing, Virtual Reality, Advanced Mechatronics, Robotics, Classical Control, and Robot Control.

Undergraduate Coursework Numerical Methods, Mechatronics, Engineering Design, Software Practice, and Algorithms and Data Structures.