# Experience

# https://scottti.dev/ scott.ti312@gmail.com

### Boeing

Software Engineer

- 10/13/2023 Present
- Engineered a highly configurable build/test execution pipeline with GitLab CI/CD, streamlining daily workflows now used by hundreds of internal engineers across several programs.
   Tech: GitLab CI/CD, Python, C++, Docker, Bazel
- Redesigned a custom test framework with a modular and extensible architecture, streamlining integration with diverse software modules and enabling automated testing across a wide range of hardware targets. *Tech: Python, C++, Bazel, Docker*
- Optimized test execution by designing and developing a load-balanced, distributed testing platform, enabling efficient parallel testing of multiple software modules across arbitrary test environments.
   Tech: AWS EC2, Python, Bash, GitLab Runner
- Developed test cases and scripts compliant to DO-178C standards and conducted testing in QEMU virtual machines, closely replicating physical hardware environments for validation. *Tech: QEMU, Python, Bazel, C++, Markdown*

# EDUCATION

 Bellevue College
 Bellevue, Washington

 Bachelor of Science - Computer Science GPA: 3.6/4.0
 September 2018 - June 2022

 Upper-Division Courses: Deep Learning, Machine Learning, Algorithm Analysis, Software Engineering, Operating Systems, Cloud
 Computing

### Skills

- Languages: Java, Python, C++, JavaScript/TypeScript, Rust, C, SQL
- Tools: Git, Bazel, Docker, MongoDB, MySQL, PostgreSQL, JUnit
- Platforms: GitLab, AWS, Firebase, Google Cloud

# **TECHNICAL PROJECTS**

• Deal! Price Comparison Web Application (Plug-in Architecture, Web Scraping, User Authentication, Full Stack Web Development, Scrum Workflow):

Tech: Java, HTML/CSS, Javascript, Spring Boot, Thymeleaf, Bootstrap, AWS, DynamoDB, Cognito, IAM. https://github.com/scottti312/deal-webapp

- Led a 4 person team to create a full-stack price comparison web application using Java, AWS, and web scraping techniques alongside agile methodology. Created clear deadlines and goals for each sprint.
- Worked extensively with AWS API to handle database operations, user authentication, and scalability, resulting in a reliable and efficient platform.
- $\circ\,$  Built and improved internal vendor plug-ins to provide product data from retailers 75% faster with parallel processing.
- License Plate Recognition Ticket Processing System (Image Processing, Computer Vision, Database, Windows Service):

Tech: C#, AWS, S3, Rekognition, Lambda, IAM, SQS, SNS, CloudWatch.

- Developed a license plate recognition ticket processing system that automates ticketing for traffic violations using captured images of license plates.
- $\circ~$  Tested against 10 license plates from different states with unique edge cases such as icons and plate designs, achieving 100% accuracy and ensuring reliable performance for the client.
- Notifies users by email or text with relevant ticket information using SNS service, reducing manual labor and streamlining ticket processing.