Nick Branch

Software Engineer | Deepening Expertise in Scalable Systems, Machine Learning, and Data Analysis

CONTACT / LINKS

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EDUCATION

GEORGIA TECH

M.S. IN COMPUTER SCIENCE

Specialization: Machine Learning 08/2024 - Expected 2027

OREGON STATE UNIVERSITY

B.S. IN COMPUTER SCIENCE 01/2017 - 03/2020 | GPA: 3.49

UC IRVINE

B.A. IN PSYCHOLOGY AND SOCIAL BEHAVIOR 09/2010 - 03/2016

SKILLS

LANGUAGES

Python • JavaScript • TypeScript • C# C • C++ • Java • Go • Powershell Bash • HTML/CSS • VBA • LaTeX

FRAMEWORKS & LIBRARIES

Node.js • Express • React • Vue D3.js • Spring Boot • Selenium • WPF .NET • Pandas • Echo

TOOLS / DATABASES / MISC

Docker • Kubernetes • Git SQL (MySQL / PostgreSQL) • Jenkins Azure DevOps • AWS • Microsoft Azure JIRA • Terraform • GitHub / Bitbucket Experience with Windows & Linux

WHAT I'M LEARNING NOW

NumPy • Pandas • SciPy

COURSEWORK

GRADUATE

Intro to Cognitive Science

UNDERGRADUATE

Analysis of Algorithms Operating Systems Web Development Defense Against The Dark Arts Computer Architecture and Assembly Language

EXPERIENCE

STEALTH STARTUP | SENIOR SOFTWARE ENGINEER

01/2024 - Present | Remote | Pre-incorporation work until Mar 2025

- Engineered a scalable modular monolith backend using Go (Echo), PostgreSQL, Redis, and Kafka for efficient real-time logistics and event streaming.
- Working on separate microservices for business needs that require horizontal scaling: Location, Notification, and Automated Dispatching.
- Wrote comprehensive unit and functional tests integrated into PR workflows, built CI/CD pipelines in GitHub Actions enforcing code quality via automated linting and mandatory test-pass checks before merges, and configured Docker for local development and deployment.
- Tools & languages used: Go, Echo, PostgreSQL, Redis, Docker, Kafka.

AWS | SOFTWARE DEVELOPMENT ENGINEER

08/2022 - 09/2023 | Bellevue, WA

- Owned implementation and delivery of multiple backend and frontend features of full stack software used by Data Center technicians around the world.
- Handled global phased release and any necessary rollbacks during release on-call along with primary on-call rotation work with under 3min response time.
- Participated in the design phase of a migration from Angular JS to React and implemented core functionality of the rendering engine.
- Tools and languages used: Java (Spring Boot), TypeScript, AWS DynamoDB, AWS IAM, AWS CloudFormation, AWS CLI, CloudWatch, S3, RDS, SQS.

DFIN SOLUTIONS | SOFTWARE ENGINEER

08/2021 - 04/2022 | Remote

- Built a stateless microservice to receive telemetry event data from RabbitMQ, transform that data, and export the spans to New Relic.
- Instrumented workflows across multiple microservices to allow OpenTelemetry data flow into RabbitMQ.
- Created Azure DevOps build and deploy pipelines, added Terraform configuration, set up Docker containers for local development and for deployment into Kubernetes Pods including horizontal autoscaling.
- Tools & languages used: Java, JavaScript, Spring Boot, PostgreSQL, MongoDB, Docker, Kubernetes, JIRA, Git, New Relic, Azure DevOps, Microsoft Azure.

RICARDO DEFENSE | SOFTWARE DEVELOPER

05/2020 - 11/2020 | Goleta, CA / Remote

- Worked as lead DevSecOps Engineer for a product suite of six products.
- Improved build speeds for existing builds in Jenkins for product suite between 45.5% and 62.7% by implementing shallow git clones, only running builds on Jenkins agents, using reference repositories to clone from after git fetch/pull, and using optimized compiler switches.
- Tools & languages used: Jenkins, Ant, JavaScript (ES6), Node.js, Express, Java, Docker, JIRA, Git, CVS, Grafana.

DIGITAL WAYBILL | SOFTWARE DEVELOPER

03/2016 - 05/2019 | Culver City, CA

- Created a C# project using .NET 4.5 adding functionality to perform queries on an Access database to delete/update records with SQL solving common support issues, knocking support time on those issues down by 75% in most cases.
- Built a customized exe with a GUI in C# to automate a task. This reduced manual task time for customers from 30 minutes to 10 seconds (99.4%).
- Tools & languages used: C#, .NET, WPF, Python, JavaScript, VB6.