

Nick Branch

Software Engineer | "Simple things should be simple, complex things should be possible." - Alan Kay

Contact

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Education

Georgia Institute of Technology

M.S. Computer Science
Specialization: Machine Learning
08/2024 - Expected 2027

Oregon State University

B.S. Computer Science
01/2017 - 03/2020 | GPA: 3.49

University of California Irvine

B.A. Psychology & Social Behavior
09/2010 - 03/2016

Skills

Languages:

Python | JavaScript | TypeScript | C#
C | C++ | Java | PowerShell | Bash
HTML/CSS | VBA

Frameworks & Libraries:

Node.js | Express | React | Vue
D3.js | Spring Boot | Selenium | WPF

Other:

Docker | Kubernetes | Git (Github /
Bitbucket) | SQL (MySQL / Postgres)
Jenkins | Azure DevOps | AWS
Microsoft Azure | JIRA | Terraform
Experience with Windows & Linux

What I'm Learning Now:

Go | NumPy | Pandas | SciPy

What Course(s) I'm Taking:

Machine Learning for Trading

Experience

Software Development Engineer | AWS

08/2022 - 09/2023

- Wrote design docs, hosted design feedback meetings, and owned implementation of multiple features of full stack software used by Data Center technicians around the world to do their work.
- Provided initial response to all Sev-2 incidents in on-call capacity in under 3 minutes followed by a deep dive into the root cause of the issue. Handled global phased release and any necessary rollbacks during release on-call.
- Resolved automatically and manually cut tickets while on-call including host patching, feature development requests, and deep dives into CloudWatch logs to root cause performance issues.
- Participated in the design phase of a migration from AngularJS 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, PagerDuty.

Software Engineer | DFIN Solutions

08/2021 - 04/2022

- Built a stateless microservice to receive telemetry event data from RabbitMQ, transform that data, and ultimately export the spans to New Relic while minimizing impact on the instrumented microservices and existing infrastructure.
- Instrumented complex workflows across a suite of microservices to allow event data flow into RabbitMQ for use in the above service.
- 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.

Software Developer | Ricardo Defense

05/2020 - 11/2020

- Worked as lead DevSecOps Engineer for a product suite of six products. Responsible for implementing new build processes and standards, improving existing processes, and diagnosing build issues.
- 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.

Software Developer | Digital Waybill

03/2016 - 05/2019

- Created a C# project adding functionality to interact with an Access Database and perform queries to delete/update records with SQL solving common support issues, knocking support time on those issues down by 75% in most cases.
- Produced a customized exe with a GUI in C# for customers to modify all fuel surcharge charge rate records. This cut down manual task time for customers from over 30 minutes to 10 seconds.
- Tools & languages used: C#, WPF, Python, JavaScript, VB6, Github.