TRENT BALLARD
SOFTWARE ENGINEER

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EDUCATION

Masters of Computer Science (AI), *University of Virginia*
8/2022-12/2022 (Accelerated Coursework)   GPA: 3.9/4.0
Coursework: Adv AI, Adv ML, Adv Algorithms, , Reinforcement Learning, Geometry of Data, Dynamical Systems, Software Analysis, HCI, Autonomous Robots, Data Analytics

Bachelor of Science, *University of Virginia*
8/2018-5/2022   Minor: Engineering Business   GPA: 3.8/4.0
Coursework: Algorithms, OS, ML, AI, Cloud, Software Dev Techniques, Cybersecurity, Data Structures, Database Systems, Computer Architecture

EXPERIENCE

Invisible Technologies, Senior Software Engineer, 11/2024-present
- Planned, architected, and developed API Gateway managing 200+ endpoints with 10M+ req/month
- In 8 weeks, created a Remote Desktop solution used by 5000+ users. Deployed as API w/ full CI/CD, multi-tenate, self-hostable. Lead to $10M+ net new business

Capital One, Senior Software Engineer, 7/2024-11/2024
- Created a generic high-TPS performance testing tool, adopted by Capital One
- Led the migration of multiple mission-critical applications to serverless with zero production incidents, enhancing scalability and reducing infra costs

Capital One, Associate Software Engineer, 2/2023-7/2024
- Optimized & maintained a mission-critical API handling 12k+ RPS, achieving 99.9999% uptime
- Reduced operational costs by $100k+ annually with code & AWS optimizations
- Implemented unit, integration, contract, and end-to-end testing

Capital One, Software Engineering Intern, 6/2022-8/2022 & 6/2022-8/2022
- Developed a Python-based chatbot to analyze & predict infrastructure failures
- Developed multiple features in React.js for a self-service credit policy authoring web app. Features deployed to production

PERSONAL PROJECTS

Profyx - E-commerce Product Analysis (Python Flask, AWS, React/Redux)
Developed backend with Python Flask that uses AI to return over 100 data points to deliver comprehensive profitability assessments for e-commerce products. Deployed to AWS with full CI/CD. Developed Chrome extension dashboard with TS, React+Redux, Tailwind, Storybook, Webpack, Recharts. 50+ users.

SharpBet - **Sports Betting Model (Python, Selenium)**
Used to turn 10k internship money into 60k in 8 months. It scrapes, aggregates, & analyzes data from multiple sportsbooks, finding profitable discrepancies through statistics, probability, & risk analysis. 10+ users

TECHNICAL SKILLS

Coding: Python, TypeScript, React, Java, FastAPI, Flask, scikit-learn, TensorFlow, Redux, Next, Tailwind

DevOps: AWS, Postgres, Dynamo, Redis, Docker, GitHub, Jest, JUnit, Splunk, Maven, k6, Postman, webpack, kafka, Playwright

HONORS & AWARDS

AWS Associate Solutions Architect, November 2023
CSSE Secure Coding Certification, July 2022
Eagle Award, *National Boy Scouts of America*, August 2017
Computer Science Student of the Year Award, May 2018