Jonathan Ross

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SUMMARY

Software Engineer with 2+ years of experience in full-stack development, web design, and data science. Proven ability to design and implement complex software systems using multiple programming languages and frameworks.

EXPERIENCE

Software Engineer

Instacart **July 2021 – December 2022, Shanghai, China**

· Designed and developed a Software Release Hub web application and service to allow internal users to manage Caper Cart software, saving 20 hours of version tracking and modification each week, using React, TypeScript, Kotlin, and gRPC.
· Contributed to, debugged, and developed code for all supporting aspects of OTA updates, including multiple React applications in a micro-frontend architecture, Kotlin microservices, and Python agents running on IoT devices to manage software updates, logs, and resolve Kubernetes errors.
· Transformed and migrated a Docker-Compose workow to Kubernetes to allow for flexible device monitoring and remote software and firmware updates on Computer Vision services in Caper Cart.
· Implemented an extensive unit and integration testing suite for frontend components and user flow with Jest and Cypress, and backend service tests using JUnit and Mockito, improving test coverage to 80%.
· Wrote, proofread, and assisted in writing 30 articles covering software architecture, the role of different microservices, and vocabulary used within and adjacent to the IoT Platform used to manage fleets of Caper Carts.

Data Analyst (Machine Learning and AI)

Taeltech **June 2020 – July 2021, Shanghai, China**

· Developed a hierarchical user profiling mechanism for product and category recommendation based on user behavior, implemented in TensorFlow, improving the naive guess by over 700%.
· Constructed an end-to-end system for the analysis (topic modeling and sentiment analysis) of over 200,000 e-commerce reviews and social media comments for several well-known FMCG brand clients.
· Trained and deployed a prediction model for automatic product classification for over 50,000 products, achieving >99% accuracy and saving hundreds of hours of manual data entry.
· Performed ad-hoc analyses of different user segments (modified RFM) for consumer targeting projects.

EDUCATION

Master of Science, Cybersecurity

Shanghai Jiao Tong University · Shanghai, China · 2020

Bachelor of Science, Mathematics

Minor in Music · Virginia Tech · Blacksburg, VA · 2017

SKILLS

Front End: React, JavaScript/Typescript, HTML, CSS, Next.js, Material UI, Tailwind, Redux, Jest, Cypress, Ethers
Back End: Python, Java, Kotlin, Spring Boot, gRPC, REST API, JUnit, Mockito
Database: SQL, PostgreSQL, MySQL, MongoDB
Tools: Git / Version Control, AWS, Docker, Kubernetes, Google Cloud Platform, Bazel, Shell Scripting (Bash), Hardhat

CERTIFICATIONS

AWS Certified Cloud Practitioner

Amazon Web Services Training and Certification · 2020