WIL COLLINS

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Product-focused polyglot engineer experienced designing & building fault tolerant distributed systems, full-stack applications, & data pipelines. Skilled at driving complex projects from concept to completion with efficiency & scalability for more than 10 years.

EDUCATION

VIRGINIA TECH

BS in Computer Science Minor in Mathematics

SKILLS

LANGUAGES

Go • Python • Java (spring) • Ruby on Rails JavaScript (node+react+vue)

DISTRIBUTED SYSTEMS

AWS • Kubernetes • RabbitMQ • Redis SQL • NoSQL • Docker • Terraform • Ansible System Optimization • Security in Depth Fault Tolerance • Microservice Architecture Blockchain • EVM • gRPC • Protobuf

DATA SCIENCE & ML

scikit • pandas • numpy • pytorch

PROJECTS

ALGORITHMIC TRADINGSole Proprietor

December 2021-Current | USA

- + Developed a Python-based trading system
- + Leveraged historical & real-time API data sources to improve signal reliability within my model
- + Integrated multiple brokerage APIs for access to different assets & liquidity
- + Analyzed stock & options market data using a variety of techniques including Monte Carlo simulations to optimize strategies, identify asymmetric trading opportunities, & improve risk assessment

VT GLOBAL DISASTERS

ML Engineer

January 2013 - May 2013 | Blacksburg, VA

+ Used NLP, machine learning, & web crawling to build a corpus of news articles related to global disasters

VT HCI

Research Assistant

January 2011 - May 2012 | Blacksburg, VA

+ Developed a distributed game with different versions to understand the effect of visible information & information security on UX

EXPERIENCE

FORKABLE / THE KITCHENS | Full-stack Engineer

May 2023 - January 2024 | Remote

- + Developed full-stack features to improve ops efficiency & customer UX using Ruby on Rails, Vue.js, GraphQL, Redis, & Postgres
- + Designed & implemented features for customer refunds, customer receipts, & enhanced user ratings that included Slack & email integrations
- + Collaborated with the product team to refine project requirements, prioritize tasks, & deliver projects aligning with strategic goals
- + Provided additional support in the form of critical performance optimizations, best practice coding reviews, & end-to-end testing to ensure robustness & reliability

AXELAR NETWORK | Backend Engineer

August 2021 - November 2022 | Remote

- + Designed & developed blockchain event-based microservices (control plane) for testnet, mainnet, & token launches using Go, RabbitMQ, Redis, Terraform, gRPC, Protocol Buffers, & Kubernetes on AWS Lambda, MQ, RDS, & DynamoDB
- + Improved reliability of RPC clients to 99.9% with prioritized round-robining, integrating multiple node providers such as Infura & QuickNode for business-critical operations
- + Indexed EVM-compatible blockchain data

COLLECTIVE HEALTH | Senior Backend Engineer

June 2017 - July 2021 | San Francisco, CA

- + Core contributor on greenfield, HIPAA-compliant medical claim adjudication pipeline
- + Designed & developed microservices (data plane & control plane) using Java Spring Boot, Go, GraphQL, RabbitMQ, PostgresSQL, Kubernetes, Terraform, & Ansible using AWS SQS, Lambda, DynamoDB, RDS, ELB, & API Gateway
- + Led quality planning & analysis for the claims adjudication pipeline which resulted in industry-best auto-adjudication level of 95%
- + Developed observability & performance metrics & dashboards for real-time monitoring of production systems using Prometheus, Grafana, & Kibana (ELK)
- + Developed SQL notebooks in DataBricks to migrate entire database using Spark
- + Optimized core SQL queries for more than 90% performance gains
- + Partnered with data science to integrate ML model as a recommendation engine
- + Founding member of the Security Champions program that built & evangelized a strong culture of security with a focus on security-in-depth, including practices such as certified training, threat modeling, & toolchain analysis

AGARI DATA, INC. | Software Engineer

November 2016 - May 2017 | Bay Area, CA

+ Developed end-to-end test frameworks, performance metrics, & monitoring dashboards to help meet NRT data pipeline SLAs

IBM | Staff Software Engineer

June 2014 - November 2016 | Bay Area, CA

- + Led a team building a robot to interface with IBM's Watson IoT API using natural language classifiers, voice-to-text & text-to-voice, Node.js command-&-control server with iOS Swift client
- + Administered virtual labs for development & testing using clusters of virtualized machines using VMware vSphere, vCluster, & VirtualBox
- + Led continuous integration of mobile project; designed & developed Appium-based mobile automation framework; evangelized best practice testing methodologies
- + Managed customer delivery of automation framework for our white label software
- + Developed ETLs to improve performance by more than 50%

FREELANCE | Product Engineer

October 2011 - Current | USA

- + Designed & developed custom web & Electron apps including a solution to manage the book of business for international film & tv production & talent agency
- + Accepted into IBM BlueMix Startup Accelerator for competitive mobile social app focused on sports fans
- + Finalist in the VT KnowledgeWorks Entrepreneurship Challenge for mobile app focused on mental health