Ryan Geary

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EXPERIENCE

Lyft - New York City, NY *December 2021-Present*
Software Engineer

- Increased rideshare profit by $10M+ annually by optimizing the dispatch algorithm to unlock marketplace efficiencies while delivering Driver- and Rider-centric features including Priority Pickup, Offline Driver Matches, and Ride Chooser
- Develop microservices supporting the dispatch algorithm, scaling to >41k potential dispatches per second, using Go, Python, gRPC, DynamoDB, and Redis.
- Design analytics events and metrics for observability of system health, debugging, and experiment analysis
- Conduct A/B experiments to measure the impact of changes and make data-driven decisions
- Design and review service-to-service relationships to maintain service levels and optimize latencies
- Serve on an oncall rotation to triage pages, debug production issues, and restore functionality in the event of outages
- Communicate technical design decisions and system knowledge through oral and written communication

Johns Hopkins University Applied Physics Laboratory - Laurel, MD **(University Affiliated Research Center)** *June 2020-December 2021*
Associate Staff Software Engineer

- Developed and maintained a suite of 11 interdependent microservices conducting near real-time network analysis on up to 3000 packets per second using Kafka, Zookeeper, Elasticsearch, Linux, Java, Python, and Node
- Supervised and developed Java, Python, and Typescript libraries for the above services to share functionality across the system
- Designed and developed a distributed Controller Area Network (CAN) simulation tool for hardware analysis using Rust, WebAssembly, and MySQL
- Designed and developed a domain specific language (DSL) grammar and interpreter for real time configuration and processing in CAN simulation tool
- Ensured and promoted software quality via unit tests, integration tests, linting, and static analysis, performed via GitLab CI pipelines
- Automated software builds and deployments through GitLab CI pipelines and Docker using Docker Compose
- Managed time between 2 to 3 simultaneous independent projects

Contrast Security - Baltimore, MD **(Forbes' "Next Billion-Dollar Startups 2019", $122 million raised by Series D)** *June 2019-August 2019*
Summer Associate Software Engineer

- Exercised Agile Scrum methodology in a team of 5, incl. daily standup, 2-week sprints, sprint planning, and retrospectives
- Developed a GitHub application to provide visibility into, and remediation of, vulnerable dependencies in open source repositories
- Integrated internal security intelligence platform and GitHub using Python, GraphQL, Webhooks, and AWS Lambda functions
- Implemented CI/CD to AWS using the Serverless framework through Bitbucket Pipelines
- Created Docker images to resolve Maven, Gradle, NPM, Pip, NuGet, and RubyGems dependencies through AWS Fargate

EDUCATION

University of Delaware *August 2016-May 2020*
Honors Bachelor of Computer Engineering

- Minors: Computer Science, Cybersecurity
- GPA: 3.9
- Relevant coursework: Operating Systems, Compilers, Secure Software Design, Networks, Data Structures, Software Engineering, System Hardening & Protection, Computer Systems Engineering, Computer Systems Design, Signals and Systems

COMPUTING PROJECTS & ACCOMPLISHMENTS

- choose [`github.com/theryangeary/choose`]
  - Command line tool aiming to be a faster, more human-friendly alternative to 'cut'
  - Primary designer, developer, and maintainer of project with 1.5k+ stars on GitHub
  - Profiled and optimized performance using 'perf' and 'flamegraph' utilities
- President of Linux Users Group at University of Delaware
  - Delivered educational talks about Linux internals, free and open source software and tools, and programming concepts
  - Promoted the use of Linux based operating systems in the campus community for educational and daily use
- Eagle Scout Award

TECHNICAL SKILLS

Programming Languages: Bash, C, Go, Java, Python, Rust, SQL
Tools: AWS Lambda & Fargate, Elasticsearch, GDB, Git, Gradle, gRPC, JSON Schemas, Kafka, Linux, Make, Protobufs, RESTful Services, Valgrind, VHDL, Vim
DevOps: Bitbucket, Gitlab, & Travis CI; Docker & Docker Compose; Test Driven Development; UNIX shell scripting