DQSevilla

[C++]

[Python]

David Sevilla

Education

Jan 2018 – Dec 2020 M.S. Computer Science, Stevens Institute of Technology, Hoboken, NJ.

GPA: 3.56/4.0 • Invited to accelerated masters program.

Aug 2016 - May 2020 B.S. Computer Science, Stevens Institute of Technology, Hoboken, NJ.

GPA: 3.75/4.0 Minor in Pure and Applied Mathematics.

• President of Upsilon Pi Epsilon (Computer Science Honors Society).

Experience

Mar 2020 – Present Software Engineer, Datadog, New York, NY.

Returned to the Web Reliability Engineering Team

Sep 2020 – Dec 2020 Software Engineer Intern, Datadog, New York, NY.

Workied in the Web Reliability Engineering team supporting the Datadog API layer.

• Managed several **Kubernetes** deployments of **Redis** cluster web caches.

• Implemented a service proxy sidecar using **Envoy**'s gRPC API for dynamic service discovery, rate limiting, circuit breaking, and authentication. [Python, Go, Docker]

• Added metrics collection and configuration file templating and generation to the sidecar.

Jun 2020 – Aug 2020 Software Engineer Intern, <u>Facebook</u>, Menlo Park, CA.

Cut behavior testing time for custom search result rankers from days to minutes.

• Designed efficient Python bindings for a generic search result ranker.

• Wrote a library to execute the ranker on large search datasets from Hive. [Python, SQL]

• Improved initial ranker execution speed by 500% using parallel batch processing.

Jun 2019 - Aug 2019 Software Engineer Intern, JPMorgan Chase, Jersey City, NJ.

Saved 300 hours of yearly effort by creating a weekly financial forecasting dashboard.

• Augmented a RESTful web service with Spring Boot and Hibernate. [Java, SQL]

• Migrated the code base into distinct microservices, and deployed with Cloud Foundry.

Jun 2018 - Aug 2018 Software Engineer Intern, JPMorgan Chase, Jersey City, NJ.

Provided transparency for calculation data to users of a financial stress-event simulator.

• Implemented a Hadoop big data pipeline using Spark and Impala.

• Redirected simulator debug info dumps to this pipeline. [Java, Bash, SQL]

Sep 2017 – Aug 2020 Teaching Assistant, Stevens Institute of Technology, Hoboken, NJ.

(semesterly) • Held office and lab hours. Designed, graded, and automated computer science assignments.

Projects

Sep 2019 – May 2020 Content Management System, Life Skills Software, Stevens Senior Design.

Service to upload and review educational media supporting special-needs classes.

o Designed the content upload API, models, and object storage logic. [Go, PSQL, S3]

• Implemented a role-based authentication model via JWT based middleware. [Go]

Spring 2020 Oat Language Compiler, CS 516 - Compilers, Stevens.

• Wrote front-end and backend AST translation to LLVM and x86 assembly. [OCaml]

• Extended the compiler frontend with type checking and lattice-based static analysis passes.

Skills

Languages Java, C, Python, OCaml, Coq, Go, JavaScript, Bash, SQL

Technologies GNU/Linux, Git, Mercurial, Docker, Kubernetes CLI, AWS CLI (EC2, EBS, S3)