David Sevilla

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Education

Jan 2018 – Dec 2020 **M.S. Computer Science**, *Stevens Institute of Technology*, Hoboken, NJ.
GPA: **3.56/4.0**
- Part of an 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

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**, *Facebook*, 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. `[C++]`
- 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**. `[Python]`
- Redirected simulator debug info dumps to this pipeline. `[Java, Bash, SQL]`

Sep 2017 – Aug 2020 (semesterly) **Teaching Assistant**, *Stevens Institute of Technology*, Hoboken, NJ.
- 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.
- Designed the content upload API, models, and object storage logic. `[Go, PSQL, S3]`
- Implemented a role-based authentication model via **JWT** based middleware. `[Go]`
- Achieved significant code coverage. Ran tests with **Docker** and **Gitlab CI/CD**. `[Go]`

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

Compiler for a small C-like language called Oat.
- Wrote modular AST translation code from Oat 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)