DQSevilla

[C++]

[Python]

# David Sevilla

## Education

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

• GPA: 3.66/4.0. Part of an accelerated program.

Aug 2016 – Dec 2020 B.S. Computer Science, Stevens Institute of Technology, Hoboken, NJ.

Minor in Pure and Applied Mathematics.

- GPA: 3.75/4.0. On Dean's List most semesters.
- President of Upsilon Pi Epsilon (Computer Science Honors Society).

## Experience

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

(current) 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 total ranker execution speed by 500% with parallel batch processing.
- Exposed both APIs to a custom Jupyter Notebook kernel, improving developer agility.

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 micro-services, 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 Course Assistant, Stevens Institute of Technology, Hoboken, NJ.

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

• Worked in both theoretical and programming-heavy computer science courses.

## 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 2019 **Type Inference Engine**, CS 810 – Type Systems, Stevens.

• Implemented Hindley-Milner type inference with Martelli-Montanari unification on a small functional programming language with references, lists, recursion, and more. [OCam1]

### Relevant Coursework

Computer Science Advanced Data Structures and Algorithms, Compilers, GPU Programming, Formal Verification,

Concurrent Programming, Advanced UNIX Programming, Reverse Engineering, Systems Administration, Type Systems, Web Programming I and II.

#### Skills

Languages Java, C, Python, OCaml, Go, JavaScript, Bash, SQL/PSQL

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