

## EDUCATION

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- **Cornell University** Ithaca, NY  
*B.Sc in Computer Science & Dyson Business Minor* *Aug. 2016 – May 2020*
  - **Relevant Coursework:** Algorithms, Artificial Intelligence, Computer Networks, Computer Vision, Database Systems, Operating Systems, Data Structures & Functional Programming, Data-Driven Web Applications, Systems Programming, Object-Oriented Programming
  - **Business Coursework:** Investments, Business Simulation, Entrepreneurship for Engineers, Digital Business Strategy, Finance, Financial and Managerial Accounting, Microeconomics
  - **Teaching Assistant:** CS 4700 (Foundations of Artificial Intelligence)
  - **Awards:** Engineering Dean's List (SP18, FA18)

## EXPERIENCE

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- **Yext** New York, NY  
*Software Engineer — Platform* *Aug 2020 - Present*
  - End to end implementation and deployment of the Page Set cloning feature. Designed new RPC endpoints to handle requests to clone and new protobufs to serialize Page Set data optimally. Integrated Page Set cloning into existing client-server architecture using Go, React, and Java.
  - Optimized Pages API by triggering republishes on linked entities and batching updates by business. Caught and fixed an issue with non-determinism when publishing consumer pages.
  - Added telemetry to one of our core backend publishing services to visualize performance metrics for the status of HTTP responses, using PromQL to generate alerts in Prometheus.
  - Refactored and wrote unit tests for our Widgets, Consulting Pages, and Self-Serve Pages products. Mocked client-server endpoints for unit testing.
- **Yext** New York, NY  
*Software Engineering Intern — Pages* *Summer 2019*
  - End to end implementation and deployment of the Page Set cloning feature. Designed new RPC endpoints to handle requests to clone and new protobufs to serialize Page Set data optimally. Integrated Page Set cloning into existing client-server architecture using Go, React, and Java.
  - Optimized Pages API by triggering republishes on linked entities and batching updates by business. Caught and fixed an issue with non-determinism when publishing consumer pages.
  - Added telemetry to one of our core backend publishing services to visualize performance metrics for the status of HTTP responses, using PromQL to generate alerts in Prometheus.
  - Refactored and wrote unit tests for our Widgets, Consulting Pages, and Self-Serve Pages products. Mocked client-server endpoints for unit testing.
- **Lockheed Martin** Manassas, VA  
*Software Engineering Intern — Databases* *Summer 2018*
  - Spearheaded and developed software for a submersible, threat detection system using digital signal processing methodologies in Java and MATLAB. Successfully ran the finished Arduino chassis and software through standardized environmental testing.
  - Debugged and resolved incident report (IR) tickets related to our existing Unix and Java codebase. Utilized Jenkins, Gerrit, and Git as our CI/CD pipeline.
  - Created Python and Bash scripts to automate the data retrieval, parsing, and visualization of LTO-6 tape drive throughput during performance testing.
  - Performed string and system integration tests for our proprietary surface ship databases.

## SKILLS

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- **Languages:** Golang, Java, Python, Javascript (React), Swift, OCaml (familiar), PHP (familiar)
- **Tools/Frameworks:** Git, SQL, d3.js, Bash, OpenCV, PyTorch, L<sup>A</sup>T<sub>E</sub>X
- **Organizations:** Poseidon Dragon Boat Team, Cornell Varsity Badminton

## PROJECTS

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- **Tetris AI:** Simulated Tetris gameplaying bot that uses genetic and greedy algorithms to clear 100+ lines. Front-end visualization implemented using Javascript.
- **Photobank:** Web application with a log-in feature for a photography/wallpaper gallery created with PHP, backed by a SQL database, and hosted on Heroku (<https://afternoon-earth-88636.herokuapp.com>).
- **UNO!:** Fully functional UNO game written in OCaml, playable against three in-game AIs. Modeled using reinforcement learning and a heuristic weight-setting algorithm, resulting in a high ( $\approx 80\%$ ) CPU win rate.