

Lloyd Brown

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EDUCATION

CORNELL UNIVERSITY, ITHACA, NY

Bachelor of Science, Computer Science, May 2019 (Expected)

Selected Completed Coursework: Object-Oriented Programming and Data Structures (ENGRD 2110, Spring 2016), Discrete Structures (CS2800, Fall 2016), Systems Programming (CS 3410, Fall 2016), Data Structures & Functional Programming (CS 3110, Spring 2017), Operating Systems (CS 4410, Fall 2017), Introduction to Analysis of Algorithms (CS 4820, Fall 2017), Introduction to Computer Networks (CS 4450, Spring 2018), Foundations of Artificial Intelligence (CS 4700, Spring 2018), Practicum in Artificial Intelligence (CS 4701, Spring 2018), Machine Learning Intelligent Systems (CS 4780, Spring 2018), Systems Principles (CS 6411, Spring 2018)

Selected Coursework in Progress: Advanced Computer Networking (CS 6450, Fall 2018)

Selected Future Coursework: Introduction to Computer Vision (CS4670, Spring 2019), Machine Learning Data Science (CS4786, Spring 2019)

SKILLS

Programming/Scripting Languages: (Proficient) C, Java, Python, SQL, Matlab

EXPERIENCE

MICROSOFT RESEARCH

New York, NY

Computer Systems Research Intern, Supervisor Dr. Siddhartha Sen

Summer 2018

- Collaborated with two other researchers to engineer a new database system in C++.
- Changes led to performance increases of up to 5x.

ELECTRONIC ARTS

Redwood Shores, CA

IT Security Project Management Intern, Supervisor Michael Lee

Summer 2017

- Led a global deployment of secure hardware to improve the robustness of the company's network, required coordination with 300 employees in 17 different countries.
- Developed a tool to improve the resource management workflow of EAIT through JavaScript, G Suite, and Google App Maker.
- Global vendor relations development & negotiations resulting in a \$20,000 savings in forecasted budget.
- Gave weekly presentations to CIO level staff surrounding the health of the department's projects.
- Improved resource management workflow to enable a collaborative and seamless experience.

CORNELL UNIVERSITY

Ithaca, NY

Research Assistant, Supervisor Professor Rachit Agarwal

Spring 2017 – Present

- Researching Resource Disaggregation to revolutionize the way computers access remote storage, providing reduced latency, utilizing C, and Amazon Web Services.
- Collaborative Research Experience for Undergraduates Scholar, planning to utilize the scholarship to display findings to the wider Computer Science community.

CORNELL UNIVERSITY

Ithaca, NY

- Led the programming of the inertial measurement unit in C++ and Python to allow the bicycle to measure changes in its motion and react using its Arduino.

PROJECTS

Secure Key-Value Store

Collaborator: Professor Rachit Agarwal at Cornell University

This project aims to create a secure key-value store which takes its relevancy from modern questions about consumer privacy. The goal is to create a store in which user's access frequencies are unknown to the service storing the user's data with better performance guarantees compared to traditional private storage paradigms.

Universal Data Structures

Collaborator: Dr. Siddhartha Sen at Microsoft Research NYC

This project involves work on a uniquely adaptive key-value store to determine the most effective way to leverage the strengths of the best data structures for each portion of workload. Our goal is to "look like" the best data structure at each timestep by enabling efficient transition.

ACADEMIC HONORS AND ACTIVITIES

Teaching Assistant for Introduction to Computer Networks (CS4450)	Spring 2019
Cornell University Engineering Dean's List	Fall 2015, 2016 & Spring 2017
Cornell University Dean of Engineering Scholar	Fall 2015 - May 2019
Collaborative Research Experience for Undergraduates Scholar	Fall 2017 - Spring 2018
Intel Corporate Award for Diversity in Engineering	Spring 2017
ACM Richard Tapia Celebration of Diversity Scholar	Spring 2017
Underrepresented Minorities in Computing	Spring 2017 - Present