

# DAVID BREWSTER

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## EDUCATION

**University of Illinois at Urbana-Champaign**  
B.S. Computer Science, Minor in Mathematics

August 2016 - Present

## TOOLS

**Programing Languages** C/C++, Python, JavaScript, Go  
**Frameworks** Numpy, Torch, Matplotlib, Node.js, React

## PROFESSIONAL EXPERIENCE

**Citadel Securities** May 2019 - Present  
*Software Engineering Intern* New York, NY

- Worked on the full stack of a couple of websocket streamers for the Options Market Making (OMM) traders
- Created a profile manager service which is being incorporated into all existing OMM UIs as an alternative to NTFS based storage

**Citadel** September 2018 - December 2018  
*Software Engineering Intern* Chicago, IL

- Developed the full stack of a websocket application for traders that shows aggregated tick data from various stock exchanges
- Created, refactored, and improved performance in a few data loaders
- Added new functionality to a couple of internal market data libraries used throughout the company

**Two Sigma IQ** May 2018 - August 2018  
*Software Engineering Intern* New York, NY

- Supported the automation of data ingestion pipelines by writing various web services
- Helped with quality control on processed datasets by recording statistical trends

**Microsoft** January 2018 - April 2018  
*Software Engineering Intern* Redmond, WA

- Added a visual tool to the Update Management section of the Azure Portal
- Significantly reduced the amount of time taken for users to diagnose failed updates on their computers
- Visual tool aggregates common error messages into a single pattern

**Google** May 2017 - August 2017  
*Software (Site Reliability) Engineering Intern* New York, NY

- Created a tool to predict cache hits/misses on different Memcached instances
- Developed a TensorFlow server that continuously trains on recent cache lookups in order to improve predictions

## SCHOOL-RELATED EXPERIENCE

**CS 126** August 2017 - Present  
*Software Design Studio Teaching Assistant* Champaign, IL

- Graded and critiqued students' programming assignments

**Carl R. Woese Institute for Genomic Biology** November 2016 - March 2017  
*Research Assistant* Champaign, IL

- Worked in collaboration with Argonne National Laboratory on the Exascale Computing Project (ECP)
- Assisted in developing the ECP Cancer Distributed Learning Environment (ECP-CANDLE) benchmarks

## PROGRAMMING SITES

- Project Euler — Computational Mathematics — 140+ problems solved
- Rosalind — Computational Biology — 60+ problems solved

## MEMBERSHIPS

- Illinois Programming League (IPL) — team placed 13<sup>th</sup> out of ~ 100 at 2017 Mid-Central Regional ICPC
- Blacks and African Americans in Computing (BAAC @ Illinois) — member