

# Aaron Lichtman

SECURITY FOCUSED · SOFTWARE ENGINEER

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## Education

### University of Illinois at Urbana-Champaign

B.S. IN COMPUTER SCIENCE AND LINGUISTICS

*Champaign, IL*

*Expected May 2020*

- GPA: 3.74/4.00
- Dean's List: 2017, 2018
- Coursework: Discrete/Data Structures, Computer Architecture, Systems Programming, VR, Computational Linguistics.

## Experience

### Course Infrastructure Developer

UNIVERSITY OF ILLINOIS - CS DEPARTMENT

*Champaign, IL*

*Jan. 2018 - Present*

- Developing plagiarism detection software that applies machine learning to code metrics and behavioral indicators.
- Analyzing natural language and parsing source code using the ANTLR and NLTK libraries.
- Researching future plagiarism detection system improvements.

### iOS Software Engineering Intern

WAYFAIR

*Boston, MA*

*Summer 2018*

- Worked on a team developing an iMessage extension in Swift and integrating it into the Wayfair iOS app.
- Improved the product sharing experience for over 210,000 daily iOS users.
- Lead the Community Coding Day event and wrote a curriculum to teach 200+ middle schoolers basic CS concepts.

### Lab Instructor - Intro to Computer Science

UNIVERSITY OF ILLINOIS - CS DEPARTMENT

*Champaign, IL*

*Aug. 2017 - Dec. 2017*

- Taught fundamentals of Java programming, algorithm analysis, and data structures in weekly two-hour lab sections.
- Worked one-on-one with students during office hours, and moderated the course forum.
- Helped struggling students succeed in the course and develop a deeper understanding of computer science.

## Open Source Software

### Stronghold

DEVELOPER-FRIENDLY MACOS SECURITY CONFIGURATION TOOL

*Champaign, IL*

*2018*

- Developed a command line interface that guides users through step-by-step secure configuration for macOS.
- Secured the workstations of more than 7500 mac users, and earned over 250 stars on GitHub.
- Gained familiarity with macOS security architecture.

### Bitvision

BITCOIN TRADING AND CHARTING SOFTWARE THAT USES ML TO FORECAST PRICE MOVEMENTS

*Champaign, IL*

*2018*

- Implemented a text analysis pipeline to analyze the sentiment of Bitcoin-related headlines for an automated trading algorithm.
- Designed and built a command line user interface using Blessed.js.
- Worked with another developer to integrate the Python backend with the Javascript frontend.

### Typesense

CHROME EXTENSION TO MEASURE TRENDS IN SENTIMENT OF MESSENGER CONVERSATIONS

*Champaign, IL*

*2018*

- Worked with a team to build the first prototype which won "Best Healthcare-related Hack" at HackIllinois 2018.
- Wrote a rolling window algorithm that analyzes change in sentiment over a set of messages using the VADER library.

## Skills

**Proficient** Python, Swift, C++, Git, JetBrains IDEs, XCode.

**Familiar** C, HTML, CSS, Node.js, Java (incl. Android), Sketch.