

EDUCATION

- **Drexel University** Philadelphia, PA
Bachelor of Science in Computer Science; Secondary major in Mathematics September 2015 – June 2019

EXPERIENCE

- **Booksmart** Philadelphia, PA
Backend Developer July 2016 - Present
 - **Webserver Development:** Python backend for a web and mobile application used by tour owners and musicians
 - **Specification Writing:** Designed new feature implementations, considering scalability and maintainability. Working with management and user interface teams to meet requirements.
 - **Data Management:** Migrating data safely to new models, preserving data integrity and backwards compatibility whenever possible.
- **Chess.com** Remote
Contract Developer March 2017 - May 2017
 - **Full Stack Feature Development:** Developed and integrated new features for a website with millions of users.
 - **Testing and Hotfixes:** Found production bugs and developed work arounds for paying users.
- **Drexel Hyperloop** Philadelphia, PA
Control Systems Software Engineer July 2016 - October 2016
 - **Sensor Data Logging:** Implemented a database for live data streaming. Data sources from various engineering systems were monitored for irregularities and performance.
 - **Requirements Coordination:** Determined software needs of multiple teams, totaling over one hundred personnel.
- **Thomson Reuters, IP & Science** Philadelphia, PA
Data Analyst March 2016 - September 2016
 - **Big Data:** Queried a Hadoop cluster to extract bibliometric data for customers. Optimized queries to deliver results timely and inexpensively.
 - **Data Cleaning:** Parsed files into a desired format. Added custom analytic fields.
 - **Web Scraping:** Started data population for new features and data models.
- **Armada International Advisors** Philadelphia, PA
Full Stack Developer October 2014 - October 2015
 - **IoT Project Development:** Independently developed a medical equipment tracking application using Texas Instruments' sensors.
 - **Web and Mobile App Development:** Developed and maintained multiple web and mobile apps.
 - **Web Scraping for Sales Leads:** Collected contact information from potential clients using web crawlers and social media scraping.

PROJECTS

- **One-way Anonymous Messaging App:** Native Android app to send and receive messages from strangers.
- **Custom Garbage Collector:** Mark and sweep memory allocation example in objective C.
- **Command Line Chess Server:** Real time chess as a simple networking example.
- **Custom Graphics Engine:** Features include VBO rendering, first person movement, and basic collision detection.

PROGRAMMING SKILLS

- **Languages:** Python, Javascript, C++, Java, Objective-C, C#, Go, Haskell, Prolog, VB
- **Technologies:** Django, MySQL, Express, HiveQL, MS SQL, Spring, MongoDB, Symfony

ACTIVITIES

- **Hackathons:** Philly Codefest, Bitcamp, Numenta NuPic, Hackster.IO Hardware Weekend, PSU Hacks
- **Chess:** Drexel Chess Club President, USCF Member