***Education***

The Pennsylvania State University. University Park, PA Expected Graduation: December 2016

B.S Computer Science. Mathematics Minor. GPA: 3.67/4.0; Dean’s List Fall 2013, 2014. Spring 2014, 2015,2016

***OBJECTIVE****:* Looking to apply programming skills on a full-time position

**Skills**

**Java, C, C++, JavaScript, PHP, NodeJS, SQL, HTML, Python, Ajax, C#.**

Spanish, English and conversational Hebrew.

***Experience***

*Software Developer Intern – Microsoft* **May – Present (Expected to finish in August) 2016**

* Worked with big-data open source technologies such as Cassandra, Kafka and Spark.
* Developed a Dynamically Linked Library using C# to obtain metadata information that Kafka would store. This library would contain functions to further understand performance of current servers.
* As a side project, developed a web application using NodeJS that would directly communicate with Kafka to retrieve and display information in an organized manner.
* Other important phases of the projects to be completed include working with Scala and Spark streaming jobs as well as adding features to existing code that will help save time and quickly determine performance of servers on a production level.

*Software Developer Intern – LiveItU* **September 2015- Present**

* Startup that helps students build an online portfolio to showcase their skills and experiences for future job opportunities.
* Developed multiple websites for the company using PHP for the back end, HTML and Javascript for the front end*.*
* Understood the importance of extensive team communication and fast-paced work in a startup environment.
* Gained knowledge on the different steps involved to launch a successful task (developing locally, staging, production server)
* Generated AJAX requests to service API endpoint and PHP integration to generate transactions to MYSQL database.

*Enterprise Application Technology Services Intern – AIG* **Summer 2015**

* Main developer in implementing a solution to automate and facilitate weekly status reports within the company.
* First website implemented connected the html to a SQL server using java servlets. Data would be stored in a database.
* Generated Ajax GET requests to fetch data from the SQL server and display it on the required format on a second website.
* Used tomcat as a local webserver for testing purposes and Datapower to host the entire project on the company’s network.
* Understood the overall architecture of the project, which led to close work with other teams such as database architects and database administrators to further implement the project.
  + Technologies applied: JavaScript, HTML, JQuery, Bootstrap, SQL, Ajax, Tomcat, Datapower.

*Project Manager Developer Team: Qlikview automation project – AIG* **Summer 2015**

* Worked with other interns to automate a manual process on how reports are generated within the company.
* Elected Project Manager of the development team. Project was divided into 4 teams.
* Responsibilities included: Importing data from SAP Business Objects to Qlikview, exporting data from Qlikview to Excel, displaying data on Qlikview in an organized and professional format.
  + Technologies applied: SAP Business Objects, Qlikview, VBA.

*Networked low-level 3D printer driver* **Spring 2015**

* Developed a low-level 3D printer driver in C.
* Printer capabilities include: Printing different materials, checking depth, moving nozzle, loading “printing models” from a file using low-level file I/O, and other features.
* Implemented network functionality with socket programing. Sent requests to server where printer options (turning on, moving etc.) would be implemented, and received responses from the server for further use. Gained a better understanding on sent and received network packets by analyzing them with Wireshark
* Efficiency was important; program ran under 8 seconds while average running time was 5 minutes.

*GoogleJump Mentorship Program*  **Summer 2014**

* Global development with 2 other teammates and a Google Engineer mentor to build Web App heat map for sound.
* Created and executed a technical skill development plan.
* Use of Google Hangouts and Github to facilitate collaboration with the team.
  + Technologies applied: Google Maps API, HTML, JavaScript, Python, Flask micro framework, Mongo DB.

*Academic Excellence Center, Engineering Department* **Fall 2014-2015**

* Mathematics tutor. Teaching students Calculus I, II, III, Linear algebra and Matrix algebra. 10 hours per week.

***Relevant Coursework***

* Computer Science 473: Operating Systems. Included low-level topics ranging from scheduling, paging, concurrency and file systems.
* Computer Science 443: Network Security. Theory and hands-on course with subjects varying from cryptography, security protocols, vulnerabilities and attacks such as buffer overflows and others.
* Computer Science 362: Communication Networks. In depth learning of the different layers such as application, transport, network etc.
* Computer Science 431W: Extensive database design class. Relational and non-relational databases such as MySQL and NoSQL respectively. Developed a web application in a team of 4 with a comprehensive design document that would serve as an online store with products, users and more stored on the database and being displayed on a front-end application.
* Computer Science 465: In depth course on different data structures and algorithms.
* Computer Science 311- Systems Programming. Unix systems programming in **C**. Virtual Machines using Ubuntu. Understood efficiency in terms of time and memory. Strong understanding on client-server operations.
* Computer Science 221- Object oriented programming with web-based applications. Used Netbeans GUI to develop a “paint app”. Created a scheduling appointment system using **SQL** for the database management and **Java** for the GUI.
* Computer Science 122- Intermediate Programming, Object-oriented programming, recursion, analysis of sorting algorithms, fundamental data structures such as Linked Lists, Hash Tables, Stacks, Queues and Binary Trees in **C++**.
* Computer Science 121- Intro to Programming Technology. Created Black Jack, Master Mind and Go Fish. **C++**.
* Calculus I, II, III. Linear algebra, Matrix algebra and Linear Programming.
* AP Computer Science in High School led to proficient skills with **Java**. Made several projects such as the game Snake, the card game War, simulated an online store. Learned and applied skills to program a robot using **Python**.

***Extra Curricular Activities***

* Participated in CodePsu. Penn State Hackathon. Teams of 3 gather to solve logic and programming puzzles.
* Participated in HackPsu. A hackathon tailored to create apps or projects for 24 hours.
  + Started developing an app for the Pebble watch that schedules reminders for people that take medicines very often.
  + Kept the project going and currently working as a side project on my free time.
  + The app generates requests to a webserver containing information such as name of the pills, time and day using Ajax.
  + Users send information from an html page to the webserver using express.js and the information is then stored on Mongo DB. When the app makes the requests it will retrieve information for a specific user from the Mongo database.
* Created a web app with node.js that uses socket.io for real time chat.
  + First a personal project, hosted code on github, deployed on heroku.
  + Main idea consists of a chat application for different PennState classes in which any student can join to a “room” and ask questions about topics not understood in class, or any other help in general. Completely anonymous to let shy users express themselves.
  + <https://classroom-chat-app.herokuapp.com>
  + Still in development, adding new features on a regular basis.