Shivam Agrawal

github.com/ShivamHacks | shivamhacks.github.io

EDUCATION

University of Maryland, College Park | **GPA: 4.00**
B.S. in Computer Science | *Expected Graduation: 2020*

EXPERIENCE

Change the World Consulting | **College Park, MD**
Student Consultant | *September 2017 - December 2017*
- Worked with a team of undergraduates to provide marketing guidance to ArtsCentric, a Baltimore-based non-profit theater. Focused on improving volunteer recruitment and retainment, devised several solutions ranging from partnership strategies to ideas for improving their digital presence.

GNext Education | **Edison, NJ**
Web Developer | *September 2015 - December 2015*
- Developed and managed all software for the company's premier robotics competition, SALL Champs, including website and social media. Created a live comment stream for the competition within a small timeline of a week. Built in HTML, CSS, and Javascript, using a Parse backend with the PubNub API.

ICEpiration | **Somerset, NJ**
Lead Intern, Content Developer, Speaker | *May 2015 - August 2015*
- Co-Led a team of high school interns in developing and presenting the technology portion of the content for a technology-entrepreneurship boot camp. Taught over twenty students the concepts of full stack computer programming, and developed a demo full-stack web application, a chat server, for the students to analyze.

PROJECTS

Built Neural Network from Scratch | *September 2017 - December 2017*
- Translated mathematical foundations of neural networks in <u>Pattern Recognition and Machine Learning</u> by Christopher M. Bishop into runnable Python code. Trained the neural network to fit various mathematical functions with high accuracy and benchmarked against Tensorflow. Presented at the Math Department.

BusNotify | *PennApps Fall 2016*
- Android app that notifies students two minutes before their bus comes to their stop using crowdsourced data. The app works by using motion detection to sense when students get onto the bus and uses this information, as well as traffic estimations, to predict the arrival time of the bus at at future stops. Built with Java and NodeJS.

PictureUs | *June 2015 - August 2015*
- Created and published a social media app for Android. The primary feature of the app was easy and instantaneous group photo sharing. Over 5000 lines of code in Node.js and Java. Deployed on AWS Elastic Beanstalk, using MongoDB as the database and Cloudinary as the image back-end.

ACTIVITIES

First Year Innovation and Research Experience
- Conducting data-driven research on factors affecting global entrepreneurship. Goal is to predict entrepreneurial success based on certain predictor variables such as industry, country of origin, and education of founder.

Quantitative Finance Society
- Researching techniques and strategies for algorithmic trading. Deploying algorithms on Quantopian platform.

SKILLS

Languages: Java, Python, Javascript (Node.js), HTML, CSS
Working Knowledge: Tensorflow, OpenCV, MongoDB, Amazon Web Services, Heroku
Tools: Git, Excel, Android Studio, Audacity
----- In my free time, I compete on kaggle.com, play tennis, and read machine learning papers -----