# Ashwin Aggarwal

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### **EDUCATION**

University of Chicago Laboratory Schools (anticipated 2018) Completed Masters Classes at the University of Chicago

- C Programming MPCS 51040
- iOS Application Development MPCS 51030

## EXPERIENCE

## Waaves 2016 - present

- Waaves is a music sharing platform that encourages independent musicians and artists to collaborate with
  users from around the world. Based in the University of Chicago Booth School founded by two MBA students,
  Waaves creates an easy method of connecting with other artists.
- Co-Developer in producing a Ruby on Rails based website <a href="http://www.waaves.io">http://www.waaves.io</a> backed with Amazon S3 music file storage and a Heroku informational database.

## VisMed3D - 3D BioTech and Printing Summer 2016

- A medical-tech startup focusing on the optimizations of 3D Printing in the medical field.
- Lead website designer and fabricator <a href="http://www.vismed3d.com">http://www.vismed3d.com</a> was made using Wordpress, custom CSS, and complex plugins. In charge of producing monthly newsletters coded in HTML and CSS; controlled the company's FTP systems which was connected to a mySQL database.
- Worked with experienced Industrial Engineers through the process of developing 3D prosthetics. We constructed a 3D printed prototype for a feeding device that helps patients who cannot eat from their mouths.

### **PROJECTS**

- Bit Box Awarded Facebook's Favorite Hack at HackIllinois 2017 (UIUC). Bit Bot is an open source program for less experienced users in the BitCoin market to make educated decisions about investing. The framework, along with some custom prediction algorithms, an iOS App, and a web server, allows users to run their own algorithms on the BitCoin market and to visualize the prediction.
- An image recognition program (coded in C) that can identify handwritten digits using a K-Nearest-Neighbor algorithm. Using Euclidian distance to define image distance, the program had a 95.3% successful recognition rate from a test set of 10,000 images. The implementation was based on the MNIST image recognition library of over 60,000 training images.
- SongBit; a song recommendation program coded in Python and Java. Utilized Spotify's API to recommend a song based on a user's listening history. Played a snippet of the song live and allowed the user to add or remove a song from their favorites bar. The algorithm to recommend a song was coded in Python and compared genres, melodies, and artists.
- Programmed numerous iOS applications using swift. Uploaded an extension app for the popular Pokemon GO game to the App Store during the summer of 2016: <a href="http://appsto.re/us/Xoi1db.i">http://appsto.re/us/Xoi1db.i</a>

## SKILLS & EXTRACURRICULARS

- Attending the invite-only Global Hackathon at Facebook's Headquarters in Fall 2017
- Fluent in Java, C, Swift, Ruby on Rails, Python, HTML and CSS, and JavaScript.
- Varsity science team member on WYSE, TEAMS, and ISO (2015, 2016, & 2017)
  - ISO State Qualifier for the Electric Vehicle (2015 & 2016)
  - 8-Person TEAMS (Tests of Engineering Aptitude, Mathematics, and Science) team ranked 5th in the nation (2016)
- Varsity math team member (2015, 2016, & 2017)
- Varsity indoor and outdoor Track & Field (2015, 2016, & 2017)
  - Competed in the Track & Field State competition in Charleston, IL during the 2015-2016 season