

Ashwin K. Aggarwal

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EDUCATION

University of California, Berkeley, Computer Science, 2018 - 2022 (anticipated)

University of Chicago, Masters Program in Computer Science (MPCS), 2016 - 2017

MPCS courses taken while in high school: **C Programming, iOS App Development, Databases**

University of Chicago Laboratory Schools [GPA: 3.8], 2014 - 2018

WORK EXPERIENCE

Computation Institute, University of Chicago

Chicago, IL

Data Analyst Research Intern

May 2018 - Aug 2018

- Analyzed AWS Spot Instance Price data to help users make more informed cloud space purchases
- Made a mathematical formula to calculate the probability of successfully launching a spot instance
- Created regression models for predicting the likelihood of buying cloud space over a time series

Scheme

Stanford, CA

Co-Developer

Jul 2018 - Sep 2018

- A startup to help disadvantaged students find summer opportunities
- Implemented a recommendation system to connect students to employers
- Used Jupyter notebooks, pandas, and matplotlib to test this algorithm on simulated data

Computation Institute, University of Chicago

Chicago, IL

Machine Learning Research Intern

Jun 2017 - Sep 2017

- Researched ensembling methods for machine learning classification algorithms
- Analyzed large material science datasets (~230k entries) in Python with scikit-learn, numpy & pandas
- Created collaborative filtering algorithms for scientific dataset recommendations

Waaves, University of Chicago Booth School of Business

Chicago, IL

Front-end Developer

Jan 2016 - Jun 2016

- Led the startup development team to produce a Ruby on Rails based website with Amazon S3
- Worked with UChicago Booth students to prepare and present weekly finance presentations
- Awarded Semi-Finalists in Booth's New Venture Challenge among the 120 startups

PROJECTS

Bridge (Python, Swift)

- Received an honorable mention at Facebook's Global Hackathon
- An application that detects sadness using biometric data, like heart rate variability, from smartwatches
- Performs sentiment analysis on a user's Facebook posts to detect if someone is abnormally sad
- Notifies close friends or family members if someone is feeling sad, prompting them to reach out

CoinTK (Python, Swift)

- Awarded Facebook's Favorite Hack at HackIllinois 2017 (UIUC)
- An open source program for users to backtest their bitcoin prediction algorithms.
- An iOS application and a web server are used to visualize the backtesting results

SKILLS & AWARDS

- Received an honorable mention (4th overall) for **Bridge** at Facebook's Global Hackathon (Nov 15-18, 2017)
- Python, C, Java, Swift, SQL, JavaScript, PHP, Ruby on Rails, C++; pandas, sk-learn, numpy, boto, plotly
- Relational algebra, entity-relationship database modeling, MVC architecture, statistical modeling