

# David Liu

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## EDUCATION

**CARNEGIE MELLON UNIVERSITY**  
**BS IN MATHEMATICAL SCIENCES**  
**AND COMPUTER SCIENCE**  
Expected May 2020 | Pittsburgh, PA  
GPA: 3.29/4.00

## LINKS

Github:// [dmliu16](#)  
LinkedIn:// [dmliu16](#)

## COURSEWORK

### COMPLETED COURSES

Principles of Imperative Programming  
Big Data & Machine Learning  
Great Ideas in Theoretical CS  
Mathematical Concepts and Proofs  
Matrices and Linear Transformations  
Calculus in 3-D

### IN PROGRESS

Introduction to Computer Systems  
Mathematical Finance  
Operations Research

## SKILLS

### PROGRAMMING

Proficient:  
Python • C • HTML/CSS • Swift •  $\text{\LaTeX}$   
Intermediate:  
Java • Javascript

### TOOLS

Chinese (fluent)  
Jupyter Notebook

### HACKATHONS

HackCMU (2016)  
TartanHack (2017)  
NBA Hackathon (2017)  
Capital One Hackathon (2018)

## ACATIVITIES

Japanese Student Association (PR Chair)  
AKPsi Professional Business Fraternity  
Intramural Basketball  
Intramural Soccer  
Go (third Duan)

## PROFESSIONAL EXPERIENCE

### EXPII, INC. | INTERNATIONAL EDUCATION STRATEGY INTERN

July 2017 - Present | Pittsburgh, PA

- Aiming to create the best online courses the world has ever had, we work closely with Po-Shen Loh, the founder of Expii, to design online math classes tailoring students of different age group and skill levels all over the world
- Invented a new way of teaching online classes; instead of offering recorded videos to students, we trained more than 50 undergraduate/graduate student TAs to teach 30 different online math classes live, so students can have the opportunities to interact with each other and have a friendly learning environment
- Designed the course structures and more than 30 teaching notes for the TAs, so that the non professionals would be able to offer the students a better experience learning with them

### BOC INTERNATIONAL (CHINA) LIMITED | OVER-THE-COUNTER TRADING SUMMER INTERN

May 2017 - July 2017 | Shanghai, China

- Followed a senior employee to organize and compile the financial sector of the listing application for Guangdong Fine Yuan Science Technology Co., Ltd; traveled to Guangdong with the senior employee to check if the assets of the company were well recorded
- Edited six BOCI Weekly Business Reports using the data compiled from the BOCI database

## PROJECTS

### SMART SPENDING | IOS DEVELOPER

Arlington, VA

- Developed the Smart Spending App with a team of five at the Capital One Hackathon. The app puts restrictions on the card holders; it only allow them to spend money at the selected vendors
- Utilized Capital One's Nessie API to track transactions and only allow the transactions from the permitted vendors to go through

### CITY HOST AIRBNB | DATA ANALYST AND WEB DEVELOPER

October 2017 - Present | Pittsburgh, PA

- Developed [dmliu16.github.io](#) using HTML/CSS and Javascript to provide Airbnb hosts in San Francisco with valuable information on how to make the most out of their investments
- Utilized Jupyter Notebook and Python to analyze and discover correlations among seemingly irrelevant information

### GOOD WILL MAP | WEB DEVELOPER AND CO-FOUNDER

June 2015 - May 2017 | Stanford, CA

- Developed goodwillmap.com with a team of five people, including web developers, software engineers, and data analysts
- Designed the front end of the website, and contacted six high schools and twenty charities to help more than two hundred high school students to find community service opportunities across the country