# Kyle Shum

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## **EDUCATION**

**University of Michigan** 

Ann Arbor, MI

B.S. in Computer Science, B.S. in Economics

September 2017 - April 2022

GPA: 3.6/4.0 | Five terms University Honors Designation

Relevant Coursework: Data Structures & Algorithms (EECS 281), Web Systems (EECS 485), Database Management Systems (EECS 484), UI Development (EECS 493), Information Retrieval (EECS 486), Discrete Mathematics (EECS 203), Mobile App Development for Entrepreneurs (EECS 441), Statistics

**University of New South Wales** 

Sydney, AU

Study abroad coursework in Economics and Indigenous Australian History

February 2020 - April 2020

#### **EXPERIENCE**

## **Ballast Point Financial Planning**

Burlingame, CA

Financial Planning Intern

May – August 2019

- Worked closely with multiple Financial Planners and provided beneficial support with any duties required
- Assisted in creating financial plans for clients based on individual risk profiles and long-term financial goals
- Investigated investment opportunities, monitored performance of all portfolios, and reviewed monthly financial statements

Mathematics Tutor

Ann Arbor, MI

Self-Employed

January 2018 – April 2019

 Hired by University of Michigan students to provide in-home academic tutoring and instructional support after class and on weekends tutoring concepts of single variable calculus, propelling learning mastery and academic success for dozens of students

# **RECENT COURSE PROJECTS**

# **Instagram Clone**

- Developed an Instagram-like web application using React for front-end, Flask for back-end, and SQLite for database management with server-side and client-side dynamic functionality
- Supported features such as user log in, posts, comments, infinite scroll

## Wikipedia Search Engine

- Implemented a search engine from scratch based on text segmentation, Hadoop MapReduce indexing, and tf-idf scores
- Delivered front-end user interface that returned ranked search results from database of Wikipedia articles

## Web Crawler

• Developed a web crawler using BeautifulSoup and Requests to traverse webpages of Umich domain applying a breadth-first strategy and implemented a PageRank algorithm to score crawled URLs

## **Room Finder Capstone Project**

• Collaborated with 3 University of Michigan students to create a web application to help University of Michigan students find classrooms, restrooms, elevators, and stairways within campus buildings with Google Maps JavaScript API functionality

# **ADDITIONAL**

**Languages:** C++, Python, C, JavaScript, HTML/CSS, SQL. Some experience with React, R, and MongoDB **Software Experience:** Microsoft Word, Excel, and PowerPoint

Interests: Camping, Snowboarding and Wakeboarding, Baseball, Traveling the World, The Office, Friends