Tianqi Zhang (Matthew)

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EDUCATION

University of Michigan, Ann Arbor   Ann Arbor, MI
Bachelor of Science in Computer Science; GPA: 3.5   *Aug. 2017 – Jan. 2022*

EXPERIENCE

Open Water Venture Capital   Menlo Park, CA
Software Engineer Intern   *Jun 2020 - Sept 2020*

- **OffChance Mobile App**: Part of the mobile app development team where we designed and implemented a MERN mobile app. As of September 2020, OffChance mobile app is undergoing beta testing on TestFlight.
- **RESTful API**: Utilized IBM Cloud Functions on IBM Cloud Platform to deploy back-end RESTful API. Created custom Docker containers for each function to include external Node.JS modules.
- **Data Storage**: Set up MongoDB for data storage and utilized IBM Cloud Object Storage for static files.
- **Authentication**: Users are required to sign up with a valid and working phone and email. Integrated Twilio verify with phone SMS and SendGrid email for authentication.
- **Notifications**: Service for sending email, SMS and push notifications. Utilized Twilio Cloud Functions and Sendgrid automation for marketing campaigns.
- **Payments**: Integrated PayPal and Stripe API for in-app purchases and implemented a sharing/referral system to encourage sign-up.

Star Charge, Wanbang New Energy Investment Group   Jiangsu, China
Data Engineer Intern   *May 2019 - Aug 2019*

- **Database Management**: Designed and set up database schema in MySQL for August campaign. Handled backup of documents on MongoDB while server room underwent maintenance. SQL querying for data analysis.
- **Data Analysis**: Pulled and analyzed data from database to determine amount of new and retained users in each province. Analysis of competitors' revenue to identify provinces where we lacked market share.
- **Campaign**: Achieved peak daily users of 60,000 with total revenue exceeding RMB1,000,000 by the end of August.

University of Michigan College of Engineering   Ann Arbor, MI
EECS484 Database Management Systems Course Instructional Aide   *Aug 2020 - Present*

- **Autograder Management**: Maintenance and testing of autograding software for projects. Holds weekly virtual office hours to provide students with personalized feedback and advice on autograded work.
- **Exam Question Bank**: Program to generate a set of random questions and solutions for each student. Each question in a set contains different values/data to minimize academic dishonesty during remote teaching.
- **Course Logistics**: Assisted in helping late-add and auditing students enroll in course resources.

SOCR Big Data and Predictive Analytics Team   Ann Arbor, MI
Software Engineer   *Aug 2019 - Present*

- **SOCR Analytical Toolbox**: Web platform for in browser interactive data analysis and visualization. Integrated Tensorflow to build browser embedded data visualizer.

PROJECTS

- **Quant Trading**: Quantitative analysis with TA-Lib on Yahoo Finance stock data to determine stocks to purchase/sell
- **Spotify-Netease Music Importer**: Uses Spotify API and Netease API to import playlists between the two platforms
- **Tournament Generator**: Webapp that handles sign-up, prelims and knockout stages for tournaments hosted by my break-dance club. React frontend with Spring Boot backend deployed to Heroku.
- **Amazon Alexa BlueBus Skill**: Amazon Alexa app that plans commute for Umich students. Developed with AWS Lambda and Google Maps API and received first place award at 2019 Umich Makeathon competition.

PROGRAMMING SKILLS

- **Languages**: Python, Javascript, C++, SQL, Golang, Java, C, Swift, HTML, CSS, Matlab

- **Technologies**: AWS, IBM Cloud, Node.JS, React, React Native, Django, Flask, Jinja, MongoDB, Express