# KEVIN ZHENG

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# EDUCATION

# UNIVERSITY OF MICHIGAN

Ann Arbor, MI

B.S.E., Computer Science (3.82 GPA)

September 2016 — April 2019

Relevant Coursework: Data Structures and Algorithms · Introduction to Computer Organization · Discrete Math · Multivariable Calculus · Linear Algebra · Probabilistic Methods in Engineering

#### SHANGHAI JIAO TONG UNIVERSITY

Shanghai, China

13-week cultural immersion and engineering coursework abroad

May 2017 — August 2017

# EXPERIENCE

### **Digital Innovation Greenhouse**

Ann Arbor, MI

Data Science Fellow

September 2017 — Present

- Developed ScatterAnimate, a Matplotlib tool to display consecutive 2-d arrays into animated scatter plots
- Conducted exploratory analysis in Pandas using student grade and course feedback data to research more effective ways to present data through the university's course visualization app, Academic Reporting Tools
- Analyzed student behaviors using an intro programming course's autograder data for instructor feedback

#### **MECC Consulting Group**

Ann Arbor, MI

Consultant, Supported Intelligence

September 2017 — Present

- Consulted a local technology startup on entering the traffic management market by researching existing Vehicle to Infrastructure and Vehicle to Vehicle solutions and reaching out to researchers in the field
- Connected client with a possible licensing opportunity and recommended 5 additional features to prototype to better reflect the traffic environment

#### Consultant, University of Michigan Health System

January 2017 — May 2017

- Prepared an audit for the Central Staffing Resources to target a \$500,000 deficit in patient attendant spending
- Offered various recommendations with a cost-benefit analysis considering the attendant assignment process and patient safety, resulting in the purchase of 10 cameras and a projecting savings of over \$500,000

# Promax Engineering, LLC

Canton, MI

Intern

June 2016 — August 2016

- Forecasted sales using shipping records in Tableau, leading to a shift towards more profitable customer orders
- Automated shipping data input using Python scripts and Excel macros, saving over 100 hours/year
- Translated 30+ page technical product brochures of robotic deburring machines from Chinese to English

# PROJECTS

### Airbnb Superhost Analysis Citadel Michigan Datathon - 1st Place Winner

• Analyzed in a team of 4 the quality of service between Airbnb hosts vs. "superhosts," hosts with listings >99% of the population. Exploratory analysis and wrangling using Pandas, superhost heat maps in Tableau.

## Embarc Together Web App - J.P. Morgan Code for Good

- Implemented Flask back-end route APIs and front-end templating, resulting in an interactive platform for students to manage reflections and feedback on "Journeys" through their community (Python, AWS, mySQL)
- Led database design and integration of a drawing board API for a multimedia way for students to connect

### CROMA (Crowds and Machines) Lab Task Router

- Researching crowd methods and workflows to improve time and accuracy of deaf speech translations
- Designed task router architecture to automate redirection of Mechanical Turk workers to paraphrase data collection tasks (jQuery, PHP, mySQL)

## Gcal Status OSX Productivity Extension

• Implemented an OSX menu bar item using Hammerspoon that displays upcoming Google Calendar events (Lua, Python, Gcal API)

### Glance Personal News Aggregator - MHacks

• Implemented web scraper to extract most salient keywords from company wikipedia pages for real-time news updates on users' stock investments (MediaWiki, Google Sentiment Analysis, EventRegistry, Twilio APIs)

### Spamassassin Email Filter Spam Classifier

 Parsed and cleaned 6,000+ emails from the Spamassassin public corpus, then implemented a linear SVM spam classifier with over 97% accuracy (Numpy, Sklearn, Matplotlib)

### Additional

- Avid volunteer photographer; assistant editor on the Michigan Daily. Photographed student events such as Lunar Gala, Celebrasia, and Jhilmilaa culture shows; concerts with Big Wild, Louis the Child **Portfolio**
- Presented a seminar on strategic use of data and visualizations to over 200 students at the 2016 Michigan and World FIRST Championships **Presentation**
- Proficient in C++, Python, Matlab, SQL, LATEX, Javascript, HTML/CSS