KEVIN ZHENG

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EDUCATION

UNIVERSITY OF MICHIGAN Ann Arbor, MI
B.S.E. in Computer Science, Minor in Mathematics (3.8/4.0 GPA) September 2016 — April 2020

Coursework (*Incoming): Principles of Real-Time Computing* · Intro to Distributed Sys.* · Deep Learning for Vision* · Intro to Operating Sys. · Object Oriented & Advanced C++ Programming · Data Structures & Algorithms · Intro to Comp. Architecture · Statistics · Combinatorics · Real Analysis

EXPERIENCE

Jump Trading Chicago, IL
Software Engineer Intern June 2019 — August 2019
- Developed an order execution gateway on a micro-trading platform to send trades to the CBOE BZX exchange. Integrated gateway with intern-built Risk and UI teams, resulting in an end-to-end click trading platform **(C++)**
- Developing application to send foreign exchange trade details to prime broker. Designed architecture to manage order allocations for aggregated trades among internal trading teams. **(C++)**

Correlation One New York, NY
Software Engineer Intern March 2019 — June 2019
- Developed backend, REST APIs, and Python/R autograder for an online data science challenge **(Python, Django)**
- Engineered highly scalable submission worker. Used **Docker** to isolate user code. Designed backend communication to cleanly handle graceful shutdown, error reporting, retries. Used **(Kubernetes)** to scale deployments.
- Set up unit, integration tests, integrated into **Travis CI** pipeline. Parallelized tests, cutting deploy times by **40%**

Facebook Menlo Park, CA
Software Engineer Intern January 2019 — March 2019
- Integrated a shot boundary detection model into Video OCR, its first production use-case. **(C++)**
- Created a shot boundary dataset from thousands of Facebook videos, then conducted experiments to find optimal (based on coverage) frame sampling parameters for shot-boundary integrated Video OCR **(Python)**
- Migrated Video OCR signal storage, saving up to **500GB/day** in cheaper storage costs **(Hack/PHP)**

Amazon.com Seattle, WA
Software Development Engineering Intern May 2018 — August 2018
- Designed and implemented encrypted customer blacklist. Minimized database calls via caching. Minimized data custodian calls via intermediate keys **(AWS DynamoDB, Lambda, KMS, SNS, SQS)**
- Abstracted customer registration number validation and encryption into a service, decoupling sensitive data handling responsibilities from main platform **(Java, Guice, Lombok)**

Michigan Engineering Consulting Club Ann Arbor, MI
Project Manager January 2017 — September 2018
- Led team of 5 consultants to advise client's penetration strategy into international talent recruiting market
- Led team of 4 consultants to advise implementation of university tool for high school students
- Audited spending at local hospital, resulting in yearly savings of over **$500,000** in patient attendant spending

PROJECTS

Airbnb Superhost Analysis *Citadel Datathon at the University of Michigan - 1st Place Winner*
- Won $20,000 prize in team of 4 at a data science challenge to analyze Airbnb rating data. **(Pandas, Tableau)**

Hammerspoon Suite *OSX Productivity Extensions*
- Productivity extensions on OSX and a desktop schedule tracker for Google Calendar **(Lua, Python)**

ScatterAnimate *Data Visualization Tool*
- Matplotlib-powered tool to animate time-series scatter plot data. Used this tool to analyze grade distribution data between courses at Michigan. **(Python)**

ADDITIONAL

- Avid volunteer photographer, covering multiple campus student events. See photos: kevzheng.com.
- Presented a seminar on data analytics in Tableau at the 2016 FIRST World Championships
- C++, Python, Java, R, Matlab, Javascript, Lua, SQL, LaTeX, Javascript, HTML/CSS
- Kubernetes, Travis CI, Docker, Git, Vim, Google Cloud/AWS