# **Kevin Fang**

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## **Education**

# **Duke University | Trinity College of Arts and Sciences**

05/2022

B.S. Computer Science, concentration in Software Systems | Minor in Linguistics Cumulative GPA: 4.0/4.0 | Dean's List with Distinction

**Relevant Coursework:** Design and Analysis of Algorithms, Operating Systems, Distributed Systems, Computer Network Architecture, Databases, Computer Architecture, Data Structures & Algorithms, Object-Oriented Programming, Discrete Mathematics, Statistics and Probability, Introduction to Data Science

# **Professional Experience**

# Instagram (Facebook) | Software Engineer Intern | New York, NY (remote) 06/2021 — 08/2021

- Improved ML-based ad-ranking algorithms to account for new factors in design and user preferences for ad formats
- Designed & implemented end-to-end Python platform for ranking engineers to determine impact of various ad features
- Created experiments on different segments of users to determine effectiveness of performance optimizations
- Built recurring data pipelines to query petabyte-scale tables with SQL for extracting ads performance signals

# Google | Software Engineer Intern | Mountain View, CA (remote)

05/2020 — 08/2020

- Developed software suite to vastly simplify integrating NLP and live-agent chat into external partner chat services
- Built server to receive chat requests and direct messages appropriately, with unit tests achieving >90% test coverage
- Integrated Firebase Realtime Database to track user and conversation status of >100,000 simultaneous conversations
- Created Python script for server initialization and deployment to GCP App Engine, reducing deployment time by ~80%

# Intralinks | Data Science Intern | New York, NY

05/2019 — 08/2019

- Performed scraPy web scraping and exploratory data analysis on Mergers & Acquisitions data to direct model selection
- Built M&A prediction pipeline consisting of supervised and unsupervised learning in TensorFlow and scikit-learn, including NLP techniques such as sentiment analysis and named entity recognition

## Curoverse Research | Data Science Research Intern | Somerville, MA

*06/2016* — *01/2019* 

- Developed gene mutation search tools to analyze terabytes of sequenced genomic data with numPy
- Predicted eye color and blood type to 95% accuracy using SVM and neural networks in scikit-learn
- Presented about open science and genomic analysis to >100 conference attendees at Harvard Medical School

# **Selected Projects & Awards**

# **Citadel Trading Competitions — 1st Place** (Duke University)

01/2020

• Won first place in two invite-only market making and betting competitions held by Citadel Securities

# Relief Mesh Disaster Network (Harvard University Hackathon)

10/2018

Facebook Award: Hack that Best Builds Strong Communities

- · Created distributed mesh network for communication using Raspberry Pi, long range radios, and GPS modules
- Implemented Huffman coding for string compression to increase transmission bandwidth

# PillUp Medicine Dispenser — 1st Place (Johns Hopkins University Hackathon)

09/2018

1st place out of 62 teams | Siemens Sponsor Award: Best Healthcare Hack

- Developed low-cost robotic pill dispenser with Arduino Mega, Raspberry Pi, and servo motors
- Created Flask web server and implemented socket.io communication protocol
- Implemented web application designed with Material-UI for physician view

## Technical Skills

## **Programming**

- Python, C, C++, Node.js, Java, Kotlin, R, MIPS Assembly
- HTML, CSS, JavaScript, SQL
- Web, Android Development
- Data Science, Machine Learning

#### Libraries

- Scikit-learn, TensorFlow, NumPy, Pandas
- React.js, Express.js, Mocha.js, Flask
- PostgreSQL, Firebase
- Common Workflow Language, RxJava

### **Developer Tools**

- Git, GitHub, LaTeX, Docker
- AWS, GCP, Kubernetes
- · Vim, Eclipse, Android Studio
- Unit Testing