# **Kevin Fang**

(617) 314-1485 • kevin.fang@duke.edu • kevinzfang.com • linkedin.com/in/kevin-fang • github.com/kevin-fang

### **Education**

### Duke University | Trinity College of Arts and Sciences | Durham, NC

Expected 05/2022

B.S., Computer Science, concentration in Data Science, minor in Linguistics Cumulative GPA: 4.000/4.000

### New York University | Tandon School of Engineering | New York, NY

09/2018 — 05/2019

B.S., Computer Science, transferred as of Spring 2019 Dean's List 2018-2019 Academic Year

**Relevant Coursework:** Design and Analysis of Algorithms, Data Structures & Algorithms, Object-Oriented Programming, Discrete Mathematics, Intro to Statistics and Probability, Computer Architecture, Economic Principles

# **Professional & Leadership Experience**

# Google | Incoming Software Engineering Intern | Kirkland, WA Duke Catalyst Tech Society | Professional Chair | Duke University

Starting 05/2020

12/2019 — present

- Maintain relationships with companies and speakers for club and school-wide talks
- Mentor students in preparation for the internship and full-time recruiting process
- Hold various professional development events for students, including technical interview workshops and resume workshops

### Duke Machine Learning | Associate Director of Sponsorship | Duke University

09/2019 — 12/2019

- Helped run Datathon, a data science competition where 300+ attendees analyze and present on a given dataset
- Acted as a Datathon judge, assessing submissions for methodology, relevance, and coherence
- Maintained and built relationships with companies and university departments for sponsorships and talks

### Intralinks | Data Science Intern | New York, NY

05/2019 — 08/2019

- Performed web scraping and exploratory data analysis on M&A data to direct model selection (scraPy)
- Classified articles by topic with 90% accuracy using Logistic Regression models (scikit-learn)
- Clustered articles with K-Means Clustering after optimizing dimensionality with principle component analysis
- Predicted M&A deals with pipeline consisting of supervised and unsupervised learning, including NLP techniques such as sentiment analysis and named entity recognition (BERT, TensorFlow)

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

06/2016 — 01/2019

- Spearheaded creation of gene + rsID tools that searched through terabytes of data for specific mutations on sequenced genomes (numPy)
- Predicted eye color and blood type to 95% accuracy using SVM and Neural Networks (scikit-learn, TensorFlow)
- Interpreted machine learning models to determine specific mutations responsible for physical gene expression
- Presented about open science and genomic analysis to 100+ conference attendees at Harvard Medical School

# **Selected Projects & Awards**

## Relief Mesh Disaster Network (Harvard University Hackathon)

10/2018

Facebook Award: Hack that Best Builds Strong Communities

- Designed and created distributed mesh network for communication after natural disasters
- Built physical mesh nodes using Raspberry Pi Zero, long range Arduino radios, and GPS modules
- Implemented Huffman coding for string compression to increase transmission bandwidth (Python)

### **PillUp Medicine Dispenser** (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 web server, used web sockets for communication protocol (Flask, socket.io)
- Implemented web application designed with Material-UI for physicians (React.js)

## Reinforced Flappy Bird

04/2018

- Modified video game "Flappy Bird" for compatibility with neural networks (numPy)
- Developed deep neural network agent to play batches of games and iteratively improve (TensorFlow)
- Implemented reinforcement learning with policy gradients to train neural network

### **Technical Skills**

### **Programming Languages**

- Python, C++, JavaScript, Java, C, Kotlin, HTML + CSS, MIPS Assembly
- Web, Android Development

### Libraries

- Scikit-learn, TensorFlow, ScraPy, NumPy, Pandas
- React.js, Express.js, Socket.io, Node.js
- Common Workflow Language, RxJava

### **Developer Tools**

- Git, GitHub, LaTeX, Docker, AWS, GCP
- Vim, Eclipse, Android Studio, Jupyter Notebook