

# KEN COLE

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## EXPERIENCE

### Software Engineering Intern - Market Data Team

#### Jane Street Capital

📅 Summer 2020

📍 New York, NY

### Software Engineering Intern - Feed Delivery Team

#### Facebook Inc.

📅 Summer 2019

📍 Menlo Park, CA

- Built automated debugger using Hack, Python, and SQL for News Feed
- Developed News Feed Backend in C++
- Trained new lightweight Feed Ranking ML model to reduce computation cost

### Software Engineering Intern

#### Alumni Ventures Group

📅 Summer 2017

📍 Manchester, NH

- Custom built website and backend server system for [www.wasabistables.com](http://www.wasabistables.com) using Linux-Apache-MySQL-PHP stack
- Automated user creation and payment

### Engineering Intern

#### Wasabi Ventures

📅 Summer 2016

📍 Manchester, NH

- Built back-end server for patent search engine app using Node.js and MySQL with Google and Facebook Single Sign-on
- Automated data retrieval from U.S. Patent and Trademark Office API

## LEADERSHIP

### Head TA - Advanced Topics in Data Science

#### Brown University Data Science Master's Program

📅 Spring 2019

📍 Providence, RI

- Designed a new course for Brown's Data Science Master's Degree Program
- Led a team of 6 TA's in holding hours and assignment creation/grading

### TA - Probability for Computing and Data Analysis

#### Brown University Department of Computer Science

📅 Fall 2018

📍 Providence, RI

- Held weekly office hours and answered student questions on an online forum
- Created and graded homework assignments
- Developed and Maintained the course website using HTML/CSS

### Eagle Scout Award

#### Boy Scouts of America

📅 April 2015

📍 Windham, NH

- Designed, fundraised for, and led the installation of a challenge course for an elementary school valued at a donation of over \$13,000

## EDUCATION

### Sc.B in Math & Computer Science

#### Brown University – 4.0/4.0

📅 Sept 2017 – May 2021 (expected)

## SKILLS

Machine Learning

Deep Learning

Mathematical Analysis

C++

C

Python

SQL

x86 Assembly

HTML

CSS

Node.js

Java

Linux

Communication

Leadership

Collaboration

## PROJECTS

### Neural Style Transfer (Python)

- Implemented Deep Convolutional Neural Style Transfer (results can be seen on my website [kencole.github.io](http://kencole.github.io))

### TaskTracker (Node.js, HTML, CSS, MongoDB)

- Full-stack web-app to manage to-dos. Supports Task creation, editing, and deletion

### Cube Runner (Java)

- Recreated Cube Runner to learn the workings of 3D graphics

### Database (C)

- Multithreaded-server to handle client-requests to an asynchronous shared database

## COURSES

- Abstract Algebra
- Accelerated Introduction to Computer Science
- Circuits and Signals
- Computer Graphics
- Computer Systems
- Computer Vision
- Data Science
- Digital Electronic Systems Design
- Discrete Structures and Probability
- Functional Analysis
- Investments I
- Linear Algebra
- Logic For Systems
- Machine Learning
- Probabilistic Methods in Computer Science
- Programming Languages
- Real Analysis
- Reinforcement Learning
- Statistical Inference