

# KEVIN CHUANG

SOFTWARE ENGINEER · MACHINE LEARNING ENGINEER

🏠 San Jose, CA  
📧 k-chuang.github.io

☎ (XXX) XXX-XXXX  
📧 github.com/k-chuang

✉ kevinchuang7@gmail.com  
🌐 linkedin.com/in/kevin-chuang

## EDUCATION

### San Jose State University

MASTER OF SCIENCE IN SOFTWARE ENGINEERING, GPA: 3.7 / 4.0

• *Coursework:* Data Mining, Machine Learning, Deep Learning, Large Scale Analytics, Recommender Systems, Graph Mining, Big Data Engineering, Computer Vision, Natural Language Processing

San Jose, CA

Aug. 2017 - Dec. 2019

### University of California, San Diego

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING, GPA: 3.3 / 4.0

• *Coursework:* Pattern Recognition & Machine Learning, Probabilistic Reasoning & Graphical Models

La Jolla, CA

Sept. 2012 - June 2016

## WORK EXPERIENCE

### HomeLight

DATA ENGINEER

San Francisco, CA

Nov. 2020 - Present

- Built & productionized internal TV ad tracking & bid optimization system with multiple data sources to enable marketing team and significantly reduce agency ad costs using **Django**, **Airflow** & **SQL** on **AWS (ECS, S3, RedShift)** and **Heroku**
- Contributed to design, implementation, and productionization of core algorithm to rank real estate agents and match them with home buyers & sellers using **Django**, **ElasticSearch**, & **SQL** on **AWS (Kinesis, S3, Redshift)** and **Heroku**

### ViacomCBS

MACHINE LEARNING ENGINEER

San Francisco, CA

Feb. 2020 - Nov. 2020

DATA SCIENCE INTERN

June 2019 - Dec. 2019

- Designed, implemented, and productionized ML service to automatically generate intelligent video previews using **Django**, **Docker**, and **Kubernetes** / **Helm** on **GCP (Stackdriver, GKE, Pub/Sub, GCS, Cloud SQL)**, **Codefresh** and **Grafana** to save company money from using external services and support internal brands (**CBS News**, **CBS All Access**)
- Built serverless ALS collaborative filtering recommendation system using **Spark**, **Redis**, **Kubernetes**, and **GCP (BigQuery, Dataproc, GKE)** to power personalized movie / show recommendations for **CBS All Access**

### Knowles Intelligent Audio

DATA ENGINEER

Mountain View, CA

Feb. 2017 - May 2019

TEST ENGINEERING INTERN

Oct. 2016 - Feb. 2017

- Designed & implemented **Python** data pipeline for verification, processing, and transfer of large amounts of critical audio data into **MongoDB** database to enable cross-functional engineering teams and created **REST API** for CRUD operations on the database

## PROJECTS

### Yet Another URL Shortener

Tools: Golang, MongoDB, AWS, Docker

- Collaborated with team in hackathon to design & implement microservice architecture satisfying **AKF Scale Cube** with **React.js** frontend, **Kong** API Gateway, multiple load balancers, **Golang** API microservices, and **MongoDB** clusters hosted on **AWS**

### Crowd Estimation

Tools: Python, Keras, OpenCV

- Implemented convolutional neural network architectures in **Keras** to count people in a given image & achieved similar performance in terms of MAE and MSE as CVPR research papers

### Data Science Competitions

Tools: Python, SciPy, Pandas, NumPy, Seaborn, Scikit-learn, Surprise

- Ranked **1st** in book recommender system, **2nd** in traffic image classification, **3rd** in news article text clustering, and **5th** in medical text classification in the final leaderboard of data science competitions

### Utopia Alexa Skill

Tools: Python, Alexa Skills Kit, Travis CI, Codecov, Zappa, AWS Lambda, Pytest

- Developed and deployed a serverless Alexa skill to help people with depression

## SKILLS

#### Programming

Python, Bash, Golang, JavaScript, MATLAB

#### Database

PostgreSQL, RedShift, BigQuery, MySQL, SQLite, MongoDB, Redis

#### Frameworks

Airflow, Pandas, NumPy, PySpark, SciPy, Matplotlib, Scikit-learn, Selenium, Keras, Django, Flask, TensorFlow, Pytest

#### Tools

Git, Docker, ElasticSearch, Heroku, Helm, Kubernetes, Argo, CI/CD, Spark, Grafana, Prometheus

#### Cloud Technology

Google Cloud Platform (Pub/Sub, GCS, Cloud SQL, Dataproc, BigQuery, Stackdriver, GKE, GCR, GCE, GAE, AutoML), Amazon Web Services (EC2, S3, RedShift, ECS, Kinesis, Lambda, Alexa Skills Kit, SageMaker)