

SOFTWARE ENGINEER · MACHINE LEARNING ENGINEER

★ San Jose, CA□ k-chuang.github.io

 ★ kevinchuang7@gmail.com
 inkedin.com/in/kevin-chuang

### EDUCATION.

### **San Jose State University**

San Jose, CA

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

Aug. 2017 - Dec. 2019

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

### University of California, San Diego

La Jolla, CA

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

Sept. 2012 - June 2016

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

## Work Experience \_\_\_\_\_

HomeLight

San Francisco. CA

Data Engineer 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 San Francisco, CA

MACHINE LEARNING ENGINEER

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**

Mountain View, CA

DATA ENGINEER

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** PostgresSQL, 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

Google Cloud Platform (Pub/Sub, GCS, Cloud SQL, Dataproc, BigQuery, Stackdriver, GKE, GCR, GCE, GAE, AutoML),

Cloud Technology

Amazon Web Services (EC2, S3, RedShift, ECS, Kinesis, Lambda, Alexa Skills Kit, SageMaker)

JUNE 30, 2021 KEVIN CHUANG · RESUME