

# KEVIN CHUANG

SOFTWARE ENGINEER · MACHINE LEARNING ENGINEER

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## 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, planning, & bid optimization system with multiple data sources to enable marketing team and significantly reduce agency ad costs by \$250,000 per year using **Django, Airflow & SQL** on **AWS (ECS, S3, RedShift)** and **Heroku**
- Contributed to design, implementation, and productionization of new core algorithm to rank real estate agents and match them with leads (home buyer/seller) using **Django, ElasticSearch, & SQL** on **AWS (Kinesis, S3, Redshift)** and **Heroku**, boosting lead conversion rate by 15%
- Built & maintained core data pipelines to ingest and process critical MLS data across the US to support property & listing pages (property search, property history) using **Airflow, SQL, and ElasticSearch**
- Designed & refactored MLS media pipelines to improve processing of large loads of images using **Airflow** and **AWS (Lambda, SQS, S3, Redshift, DynamoDB, CloudWatch)**

### 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**

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

#### Tools

Git, Docker, ElasticSearch, Heroku, dbt, 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 (SQS, EC2, S3, RedShift, ECS, Kinesis, Lambda, CloudWatch, Alexa Skills Kit, SageMaker)