

Kevin Yang

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GitHub /k-yang

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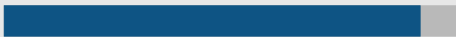
<https://k-yang.github.io/>



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Languages

Python



JavaScript



Scala



HTML+CSS



Java



C#



Android



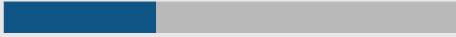
PHP



SQL



C++



Professional Experience

Sept -
Dec 2017

Software Engineer - Infrastructure
Coursera

Mountain View, California, USA

- Maintained **Redshift** cluster and developed web tools for interacting with data warehouse
- Implemented **Redshift Spectrum Layer** to use **S3** as the main data lake, improving concurrency and reducing disk usage
- Conducted **AWS** security audit for configuration management; enforcing disk encryption, least privilege security groups, least privilege **S3** buckets, and user credential best practices
- Developed framework for analysts, data scientists, and product engineers to ETL data

Sept -
Dec 2016

Software Engineer - Data
Memebox

Seongnam-si, Gyeonggi-do, South Korea

- Developed scalable data pipelines using **AWS Kinesis Firehose**, **S3**, **EMR**, **Spark**, and **Redshift** with error logging, monitoring, and alerting
- Integrated third party (**SegmentIO**) data collection libraries on client applications with minimal impact on performance and user experience
- Developed robust internal data visualization tools using **Flask+uWSGI+nGinx** as the server stack, **Redis** and **Redshift** as the data store, and **MaterializeCSS+D3JS** as the user interface

May 2015 -
Apr 2016

Software Engineer - Backend
Athos

Redwood City, California, USA

- Developed RESTful APIs on a **Flask+uWSGI+nGinx** stack to handle user authentication, user management, and core business features, along with error handling, monitoring, and Slack webhook alerting
- Wrote deployment scripts for localhost and **AWS EC2** with **Ansible**
- Configured, deployed, and maintained the continuous integration/continuous deployment **Jenkins** Server
- Built a robust data consumer with **RabbitMQ** to handle gzipped client file uploads
- Conducted an **AWS** usage audit, leading to 20% reduction in monthly cloud hosting bill
- Built an internal CRM tool on a **Volt+Phalcon+MySQL** stack

Projects

Jan 2017

Gestur
<https://devpost.com/software/gestur>

Built at SpartaHacks 2017

- Developed a web client using **Flask+uWSGI+nGinx+WebRTC** to integrate live webcam feed with IBM Watson's image classification service
- Used **Docker** to containerize and streamline deployment process
- Generated our own training data using red tape on fingers and colour filtering
- 🏆 Best Use of IBM Bluemix, Best Use of Open Source, 3rd Overall

Skills

Databases

Infrastructure

Machine Learning

Distributed Computing

DevOps

Networking

Frontend

Backend

Redis

nginx

MySQL

Django

Flask

ReactJS

AWS

Projects (Cont'd)

Jan 2017

Ramsay

Built at DeltaHacks III

<https://devpost.com/software/ramsay-nl32ya>

- **Amazon Alexa** app for hands-free cooking advice
- Built a web scraper with **BeautifulSoup+NLTK Python libraries** to store thousands of online recipes in **MySQL**
- Developed **RESTful APIs** using **Flask+nGinx+uWSGI+MySQL**
- Wrote **Alexa nodeJS** functions that used those **RESTful APIs**
- Used **Docker** to containerize and streamline deployment process
- 🏆 Best Use of AWS, Best Use of Web Technologies

Jan 2017

Scout

Built at Hack the Valley 2017

<https://devpost.com/software/scout-rb3gej>

- Uses webcam to capture video of users watching online content and performs sentiment analysis on facial expressions to determine when peak emotions are felt
- Built on **Microsoft Azure**
- Front-end with **MaterializeCSS+Plotly**; back-end with **Flask+uWSGI+nGinx+SQL Server**
- 🏆 Best Use of Microsoft Azure

Feb 2016

minify(Wallstreet)

Built at HackTech 2016

<https://devpost.com/software/minify-wallstreet>

- Scraped articles from financial websites and applied **NLP+sentiment analysis** for short term stock predictions
- **BeautifulSoup** to scrape web data, **Microsoft LUIS** for entity extraction, **Indico** for sentiment analysis, **Clarifai** for image identification
- 🏆 Best Financial Hack from Quantiacs

Oct 2015

Sage

Built at BostonHacks 2015

<https://devpost.com/software/sage>

- Personalized assistant Android app
- Developed **RESTful API** using **Django**; leverage **Microsoft LUIS** for intent extraction
- Integration with **Yelp, OpenWeather, Wolfram, HP-Haven Sentiment Analysis**
- 🏆 Best Use of AWS, Top Wolfram Hack

Sept 2015

FedUp

Built at Hack the North 2015

<https://devpost.com/software/fedup>

- Social justice **Android** app to prevent police brutality and provide legal advice for victims
- Records and uploads audio to **Dropbox** with geolocation and timestamp data
- Web client built using **.NET framework**
- 🏆 Best use of Dropbox API

Education

2013 - 2018

BASc., Electrical Engineering

University of Waterloo

Waterloo, Ontario, Canada

Cumulative Average: 94%, #1 in Program