khangly@berkeley.edu (626) 618-6969

## **EDUCATION**

#### • University of California - Berkeley

Berkeley, CA

B.S. Electrical Engineering and Computer Sciences; GPA: 3.98

Jun. 2018 - Dec 2020

- CS Courses: Data Structures (CS 61B), Machine Structures (CS 61C), Computer Security (CS 161), Operating Systems and System Programming (CS 162), Algorithms (CS 170), Database Systems (CS 186), Artificial Intelligence (CS 188), Machine Learning (CS 189), Parallel Programming (CS 194-15)
- EECS Courses: Probability and Random Processes (EECS 126), Optimization Models (EECS 127)

# • Pasadena City College

Pasadena, CA

Associate degrees; GPA: 3.92

Jun. 2016 - Aug. 2018

## SKILLS

- Languages: Python, C/C++, Java, Go, SQL, PHP, JavaScript, Bash Script
- Technologies: AWS, Bazel, Docker, Kubernetes, Flutter, PySpark
- Computer Science: Data Structures, Algorithms, Operating Systems, Machine Learning, Databases

#### EXPERIENCE

• Theorem LP

theoremlp.com

Software Engineer Intern

Jun. 2020 – Aug. 2020 (8 weeks)

- Theorem has developed a model that scores loans, mostly 3 to 5 year loans on lending marketplaces. I made an extract, transform, load (ETL) pipeline that scores all the loan data Theorem has (about 5M loans).
- Discovered and fixed high memory usage of some ETLs. Reduced memory usage more than 90% for some tasks.
- Sped up the process of loading external data to Theorem's data warehouse by more than 10 times by making data schema inference and parquet format conversion in the cloud (using AWS Glue).

#### PERSONAL PROJECTS

• Hot Deals Alert

github.com/khangly/HotSD

- A web service that notifies people about super hot deals!
- Deals data are collected using a Python script from the website slickdeals.net.
- Data are then analyzed using Numpy and Panda.
- A web interface is still in progress.

# • Handshake Applicator

github.com/khangly/handshook

• A Python script that automatically applies to jobs on Handshake. It fetches jobs on Handshake and determines if a job is easy to apply, then it sends the application.

#### • Database Scripts

github.com/khangly/CS186Scripts

- Calculates IOs of many relational database operations, such as hash joins, sort merge joins, nested loop joins.
- Visualizes dependency graphs and wait for graphs.

# Involvement

#### • Data Structures (CS 61B)

Academic Intern

 $Summer\ 2019$ 

• Taught students data structure concepts during labs.

#### • Tau Beta Pi, Eta Kappa Nu

Member

Spring 2019 - Present

## Awards

#### • Jim and Donna Gray Endowment Award

UC Berkeley

Recipient

Spring 2019 - Fall 2019

• Awarded to computer science students completing their junior year who have demonstrated both high scholastic achievement and financial need.