# **Aston Khor**

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## **Experience**

January 2020 - Present

#### Hack Reactor, San Francisco CA - Software Engineer Fellow

• Lead and mentor 60+ junior engineers on computer science fundamentals, data structures/algorithms, modern full-stack web development technologies (including React, Redux, Node, Express), databases (including MySQL, PostgreSQL, MongoDB, Cassandra), and app deployment (including AWS EC2, S3, Docker, various load testing tools).

July 2018 - January 2020

## **Digilens, Sunnyvale** CA - Process Development Engineer

### Technologies Used: React, Node, PostgreSQL, AWS, Javascript, Python

- Architected web-app for deployment of microservice computational software on AWS computational EC2 instances.
- Leveraged React and POSH html to create sleek and accessible front-end interface.
- Implemented proxy server architecture to allow for user authentication, cookies, and sessions for webapp.
- Developed software in python for image processing of dithered templates, reducing time from 25min to 10s.
- Created python(pandas) excel scraper to consolidate and import large volume data into statistical software JMP.

## **Software Engineering Projects**

**Bite** - Backend Scaling in Cassandra of Restaurant Lister,

#### Technologies Used: Cassandra, Loader.io, AWS, New Relic, Nginx, Artillery, Javascript

- Architected backend in Cassandra to improve scalability of legacy application to handle millions of users.
- Optimized read/write ratio of cluster with multiple data centers, 6 node data centers, and replication factor of 3.
- Increased replication factor and decreased consistency factor to improve reads at the cost of writes and consistency.
- Horizontally/vertically scaled Cassandra to achieve 2500RPS throughput.
- Load balanced with nginx to allow for increase in server bandwidth.

#### **Argo Trade** - Full-Stack Stock Trading Platform

## Technologies Used: JS, React, Express, MongoDB/Mongoose, Styled-Components

- Built interactive D3/SVG graph with bisected hover-over focus and sliding price ticker.
- Optimized page load speed with CSS sprites and express compression.
- Containerized microservices using Docker and DockerHub, eliminating the need for external dependencies.
- Architected Express proxy server that handled Yahoo finance API requests and routing to component servers.

#### **IndoorRock API** - Open API for access to database of web-scraped indoor rock climbing gyms

#### Technologies Used: React, React Hooks, Bcrypt, Node, Javascript, PostgreSQL, Heroku

- Implemented web-scraper for MountainProject, TheCrag, ClimbingBusinessJournal, 8a.nu to grab climbing gym data.
- Deployed application on heroku for quick deployment and availability.
- Instituted user authentication, cookies, and sessions for webapp.

#### Education

September 2014 - June 2018

## University of California San Diego, San Diego CA - Bachelor of Science: Chemical Engineering

## Skills

Front-End: Javascript ES6+, React.js, Redux, HTML, CSS, jQuery, Webpack, Babel, D3, Python

Back-End: Node.js, Express, MySQL, MongoDB, Mongoose.js, Cassandra, Amazon Web Service(AWS), Docker, PostgreSQL

Other: Git, Mocha/Chai, Jest/Enzyme, Linux, Ubuntu, Nginx, New Relic

#### Personal

Badminton Dance

Previously ranked #8 men's doubles in US
Previously ranked #1 junior in doubles and mixed doubles in US

Dance Director - BodyRock (4 yr. experience)

NBA Cavaliers Half-Time Performer - Scream Team