# Sebastian Su

## Education

Fall 2015 -Fall 2019 B.S. Computer Science, University of California, Berkeley.

Relevant Courses: Efficient Algorithms, Data Structures, Database System, Priciples and Techniques of Data Science, Artificial Intelligence

## Work Experience

October 2020 -Current Software Engineer, Michaels (michaels.com), San Jose, CA.

- o Part of company-wide initiative to completely redesign Michael's online ecommerce experience
- o Full stack engineer in charge of both designing and implementing key customer facing features in the Customer Resolution team
- Backend: services such as authorization and authentication in customer care portal using JWT and Sprint AOP, In-App Messaging, and user registration involving login/logout, activation and passwords reset using Sprint Boots
- o Frontend: build variety of web pages such as User Search, Listing Management, Order Management, and Seller Dashboard using React, Redux, and JavaScript

Jan 2018 -August 2019 **Software Engineer**, Qcompass Voyage Limited (qeeq.com), Hong Kong, China.

- o As part of this startup that provides car rental services in 160+ countries, I worked as part Full Stack Software Engineer and part Data Analyst focused primarily on pricing strategy
- o Data Analytics: designed, built, and launched data analytics used by 200+ internal customers daily from product, marketing, and finance teams using JavaScript, Highcharts JS and Power BI
- Data Processing: optimized existing data pipelines and automated large scale data processing systms, with data quality checks.
- o Data Modeling: deploy AI and ML regression algorithms for competitive pricing models

## Projects

#### Spring 2021

#### In-App messaging.

- o Designed and implemented an in-app messaging service for buyers and sellers to communicate (Sending texts and images) in online marketplace
- o Implemented APIs to store and retreive recent contacts, tagged conversations, and unread messages count
- o Developed notification system integrated with Twilio's API to improve user engagements
- o Lead implementation of new feature that adds broadcast message service support

## Fall 2020

#### IAM: Identity and Access Management.

- o Designed and implemented an Identity and Access control management service with RBAC for an internal customer care portal
- o Built RESTful API for (CRUD) users, roles, and permissions, and create/delete user-to-roles and role-to-permissions mapping
- o Implemented activity log for read/write operations for important resources using Spring AOP with multithreading
- o Implemented schedule task and smtp email service for notification of change and alerts

#### Spring 2019

#### Relational Database Management System.

- o Developed a Relational Database Management System using Java which supports SQL operations such as conditional statements, table joining, column operations, column select, and file recovery
- o Implemented B+ tree for dynamic multilevel file indexing with bulkloading
- o Implemented join algorithms (PNLJ, BNLJ, External Sort Join, Sort Merge Join) and System R query optimizer
- $\circ$  Implemented write-ahead logging and ARIES recovery manager

#### Fall 2018

#### Apache Flink Optimization.

- o Built a streaming data application to aggregate search data and visualize search event click-through rate for travel marketing channels such as top 50 travel destinations
- o Made substantial improvements in terms of query time, latency, throughput, and cached data in database

### Skills

Programming

Java, Python, JavaScript, HTML, CSS

Software

Sprint Boot, MySQL, MongoDB, Couchbase, Kafka, Flink, Jmeter, React.js

Redux, Docker, AOP, Redis, Cassandra

Data Science

TensorFlow, PyTorch, Pandas, Power BI, Tableau