ANDREW JIN

FULL-STACK DEVELOPER

CONTACT

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PORTFOLIO

- **TikTok**
  C++, Python, Recommendation Systems, Neural Networks
- **Shopee**
  Algorithms, Anti-fraud, Graph Database, Apache Airflow, PySpark, PySpark, eCommerce
- **Shopee**
  Python, Recommendation Systems, Graph Databases, Neural Networks

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EXPERIENCE

- Python - 5 years
- Deep Learning - 4 years
- DNNs - 4 years
- Data Analysis - 4 years
- Recommendation Systems - 4 years
- Machine Learning - 4 years
- eCommerce - 3 years
- Computer Vision - 2 years

PREFERRED ENVIRONMENT

Linux, PySpark, Python, Keras, TensorFlow, Docker

THE MOST AMAZING...

...system I've developed was for TikTok, and it's popularity is due, in large part, to the successful recommender system I built.

ABOUT ME

Andrew is a machine learning engineer specializing in recommender and anti-fraud systems. He has been working in data science and AI for the past four years, including building and improving the recommender system for Shopee and TikTok, which have hundreds of millions of users and items. Ming's industry experience is backed by a master's degree in computer science.

WORK EXPERIENCE

Data Scientist

FWD Group   2021 - 2023

- Led deliverables through the entire data model cycle, incorporating, developing, and standardizing the MLOps framework for models, features, and data. Accelerated model development and deployment to a matter of weeks.
- Developed propensity-based model framework and campaign design.
- Organized data-driven business decisions and campaign initiatives through analytical efforts and insights.
- Implemented AI models and data pipelines on Azure via Databricks, Pyspark, and Python.
- Handled campaign lead generations, product recommendations, lapse loyalty, and segmentation models for different markets and platforms.
- Acted as the POC on using LLM to enhance coding practices and business use cases.

Senior Software Engineer

Shopee   2020 - 2021

- Maintained core user APIs and cache consistency, updated the pipelines, took on-call duties, and handled a 500,000 queries per second (QPS) peak.
- Led the development of features related to the user's address. Talked to project managers and related stakeholders about product features and design system architecture.
- Built test cases and lint rules and reported the test coverage on GitLab.
- Wrote proper documentation about our and others' systems and set up standards for how to write API documentation within our team.

Senior Software Engineer

Grab Holdings   2019 - 2020

- Led the development of an auto-billing service for advertisers, creating the complete service from scratch to production.
- Spearheaded our service infrastructure and load test internal system. Managed the auto-scaling policy on AWS, ensuring the service met its SLA under a given load.
- Took on-call duties, answered colleagues' questions, debugged issues, created Jira tickets based on user feedback, and improved monitoring alerts based on incidents.

Senior Software Engineer

90 Seconds   2018 - 2018

- Designed and implemented GraphQL API endpoint for different apps. Furthermore, I also improved the GraphQL subscription in the GraphQL-Ruby repository.
- Upgraded the monolith website from Rails 3.2 to 4.2.
- Synchronized with the product team to identify the real problem, managed tasks for other back-end engineers, and set up proper Git workflow with Jira and GitLab.

Software Engineer

Castlery   2015 - 2017

- Developed a customer review module using React and Redux.
- Built the basic product and voucher logic in Solidus.
- Designed the listing product attributes and pushed them to Elasticsearch via CronJob.

E X P E R I E N C E

Ad Auto Billing Pipeline

Implemented an auto-billing pipeline in Go, which Grab uses to bill the merchants who use GrabAds. The pipeline aggregates the ingested ad display data and creates the billing records by calling the corresponding services.
I built the entire pipeline from scratch, using AWS Lambda and CloudWatch. It has a test coverage of more than 70% and runs daily for all Southeast Asia countries where Grab operates.

Customer Review Listing Page

https://www.castlery.com/sg/reviews
Castlery had a customer review listing page with a Ruby on Rails back end serving customer cases, allowing customers to post reviews independently. The front end was a React component initially placed on a Magento eCommerce website. The company then migrated the website to a Ruby on Rails serving the back-end API and React front-end website. This review component was then integrated with the other components as a complete, single-page application.

Music Notebook

Music Notebook is a notebook for people to upload music and share comments.
I was in charge of building the whole back end, including providing RESTful API, supporting live events via ActionCable, processing the uploaded music via Google Cloud Functions, and monitoring it via Datadog. The app was deployed on Heroku, running in the lowest pricing tier, such as the hobby tier.

Education

Master's Degree in Computer Science   2016 - 2018
National University of Singapore - Singapore

Bachelor's Degree in Computer Engineering   2010 - 2014
National University of Singapore - Singapore

Certifications

Parallel, Concurrent, and Distributed Programming in Java   DECEMBER 2018 - PRESENT
Coursera

Deep Learning   JULY 2018 - PRESENT
Coursera

Architecting with Google Compute Engine   JULY 2018 - PRESENT
Coursera