Backend API Developer

Data Science + Web Projects Portfolio: ye-yu.github.io/portfolio

Skillset Summary

- Machine Learning using sklearn & Tensorflow Python programming
- Chatbot NLP Module: node-nlp, entity extraction
- Transfer learning from TensorFlow Hub
- Databases: MySQL with JSON columns, Redis, ElasticSearch
- RESTful API: express TypeScript, aiohttp Python, SpringBoot Java
- Microservices: Access authorization with JWT, Chatbot content management, Analytics module
- Devops: AWS Fargate, EC2, S3, Cloudfront, Route53

Recent Education

Bachelor of Computer Science (Hons) Majoring **Data Science** | Multimedia University, Malaysia CGPA 3.89 (June, 2017 – June, 2020) – Scholar of Yayasan Telekom Malaysia

Experience

Tech Lead for TnG T@nGO Chatbot | Everise DX Malaysia, KL | June 2021 - Now

- 1052 users, 1445 conversations, 631 addressable conversations (100% accuracy)
- 50 FAQ converted to automated response
- Adopted Jira for task management, time tracking

Full Stack Developer | Everise DX Malaysia, KL | Dec 2020 - June 2021

- Chatbot development using **keyword extraction**: intent and entity
- **Text preprocess** from synonym dictionary less training data required for training
- Separating user module from application module for **multi-tenants architecture**
- **API testing** using Mocha, Chai, and Supertest for CI/CD build with **Azure Devops**
- **SQL optimisation** using inner select on JSON columns
- Chatbot frontend with **React** and **Redux**, page router using React Router

Data Engineering Intern | MoneyLion Malaysia Sdn Bhd, KL | March – June 2019

- Programming ETL routine from MongoDB and other SQL DBs to RedShift using Airflow and cron
- Using Spark in **Java** and **spark-submit** to launch jobs and to extract 95% of GB-sized text files
- Configuring **spark** and **hadoop** in Linux
- Designing web layout for internal program using **HTML** + **CSS**
- Using **Agile with Jira** to complete 5 tickets every 2 weeks

Projects

[Everise DX] Jan, 2022

FAQ Chatbot - Automated response with business flow integration

- Implementing AI solutions to **RESTful API**s for end user consumptions
- User data integration with TnG Mini Program
- Zendesk integration for ticket management and live chat with agent
- Messenger integration Facebook, WhatsApp with Sinch, Telegram

[Side project] July, 2020 (github.com/ye-yu/minecraft-data)

Minecraft Data – A game play data capturer

- Scope: Data collection, data engineering
- A client-side Minecraft mod for recording player play data using **Kotlin**
- Using a publisher thread, a consumer thread, and a shared ring buffer to periodically push player data
- Using byte encoding to reduce latency caused by fast periodic reading and writing

[FYP] June, 2019 – February, 2020 (github.com/ye-yu/cac-svs)

Extending Partial Singing Samples using Computer Assisted Composition and Singing Voice Synthesis

- Scope: Data science, unstructured data
- To extract audio features from singing voice input + To generate singing voice to complete input
- Training of Seq2Seq **neural network model** for note generation from singing songs
- Extracting timbre from voice as attribute for synthesising singing voice

Communication

Full Proficiency: English (MUET Score: Band 5), Bahasa Malaysia

Casual Speaking: Mandarin Chinese