RYOZO MASUKAWA

rmasukaw@uci.edu in Ryozo (Andre Leon) Masukawa (He/Him) ♀ RyozoMasukawa ♦ Homepage

Education

University of California, Irvine

Master of Science in Computer Science

September 2023 – Present *GPA: N/A*

Meiji University, Tokyo

Bachelors of Science in Computer Science

April 2018 – March 2023

Advisor: Tomohiro Takagi at Web Science Laboratory (WSL)

University of California, Berkeley

June 2019 – August 2019

GPA: 4.0/4

GPA: 3.86/4

Award

Academic Excellence Award at Meiji University

March 26, 2023

Awarded for a student who ranked 1st out of undergraduate class

Technical Skills

 $Summer\ Sessions$

Languages/Database: Python (proficient), C (proficient), C++(proficient), Java(prior experience), Kotlin(prior

experience), Verilog HDL (prior experience), SQL (prior experience), JavaScript (prior experience)

Web Technologies: Django, Django REST Framework, React.js, Railway, firebase

Software & Tools: Docker, Microsoft Office, GitHub, TEX

Projects

Full-time Research with airCloset at WSL | Pytorch, GAN, CLIP, VL models Git

April 2022 – March 2023

• Served as a project leader

• Developed Deep Learning models for clothing design generation according to the fashion trend

- Implemented the entire architecture of trend forecasting module and GAN-based generative model
- Published 2 papers

Part-time Research with LAC at WSL | Pytorch, NLP, Transformer, huggingface Git

Sept 2022 - August 2023

- Surveyed GAN-based time-series tabular data generation for financial fraud detection
- Implemented GPT-based table data generation model
- Implemented Transformer-based System Log summarization Model inspired by Unilog and chatGPT API

 $\textbf{Team web app development} \mid \textit{Django REST framework \& React Git(team) link(frontend)} \qquad \textbf{April}$

April 2023 - July 2023

- Developed a restaurant recommendation web app using chatGPT API with Web Science Laboratory members
- Set up an uniform development environment using Docker
- Deployed the app using railway and firebase
- Implemented both basic frontend and backend source codes

Android App Development for Ningyocho Shopping Board Event | Kotlin, realm Git April 2020 - July 2023

- Developed and still maintaining an Android application to support annual event in Ningyocho Town
- Automated sales calculation by using database and created a simple game as a substitute of the event
- Halved the time for calculating total sales from the past

Publications

Comment generation using a large language model for fashion item recommendation | link

August 2023

• Preprint to MMAsia 2023

Trend Analysis-Based Fashion Image Generation | link

June 2023

• The 37th Annual Conference of the Japanese Society for Artificial Intelligence, 2023 (JSAI 2023)

GAN-based Detailed Clothing Generation System | link

February 2023

- The 17th International Conference on Knowledge, Information and Creativity Support Systems (KICSS 2022)
- Developed a GAN-based clothing image generation model that can specify the clothing design in detail

Extracurricular works and Internships

Integrated Quality(IQ), a Computer Programming Club

Sept 2019 - March 2023

Accountant officer

President

• Taught underclassmen basic concepts of Computer Science in C language

• Served as accountant officer in final year

Meiji University Study Abroad Advisor

April 2021 - August 2022

Tokyo

• Supported underclassmen willing to study abroad

• Served as a **president** of all advisors in 2022

Nomura Research Institute(NRI) Internship

August 2021

Intern

Tokyo

Tokyo

• Designed an architecture of an automated secure access log transmission system to the client companies for governmental scrutiny

Japan Tata Consultancy Services Internship

Sept 2021

Intern

Tokyo

- Developed a Support Vector Machine based machine learning model for subway passenger population prediction
- Won the first prize in terms of forecasting accuracy

SmartTrade Internship

February 2020 - April 2020

Intern

Tokyo

- Worked in a project to develop stock price forecasting algorithm using machine learning
- Aborted Due to the COVID-19 Pandemic