Ryotaro Kimura

Engineer specialising in Human Computer Interaction, Intelligent Machines and Web Development

Experience

Freelance Engineer

Self-Employed

☐ May 2023 — Present

• Remote

- Teaching and consulting machine learning, web development, and basic Python programming
- Involved in the development of product management systems using TypeScript, React, StoryBook and TailwindCSS running on AWS
- Developed data-vizualization tools using D3.js, SvelteKit, PostgreSQL, and Cloudflare Workers

Cloudflare Engineer

NOT A HOTEL Inc.

- ☐ Jan 2024 Mar 2024
- Japan | Remote
- Developed AI assistant for customer services using Cloudflare Workers, GCP, OpenAI API and React

Full-Stack Engineer

Eightis Inc.

- ☐ July 2022 Aug 2023
- Japan | Remote
- Launced and Developed Shintai: a web and iOS based platform for body-alignment training
 - ▶ Web: SvelteKit, Cloudflare Workers and PostgreSQL
 - ► iOS app: Swift, SwiftUI and Firebase authentication
 - Machine learning: fine-tuning of pose detection model and run on CoreML
- Collaboration work with atheletes and trainers

Co-Founder and Chief Research Officer

QuantumCore Inc.

- Oct 2018 June 2023
- Tokyo, Japan | Remote
- Worked on Qore: the core-algorithms to enhance Reservoir Computing(RC)
- 2018 2019: Implement RC and data preprocessing algorithms originally written in Python to embeded devices using C/C++
 - Achieved 120x faster training time compared to LSTM and enabled deployment on embedded devices, including Raspberry Pi and M5Stack.
- 2018 2023: Created and presented a dozens of PoCs using RC, mainly in the field of time-series, audio processing, and image processing
- 2020 2023: Launced, developed and operated Sloos: a minute-taking app for remote workers
 - Applied speaker-detection algorithm with RC to automatically generate meeting minutes
 - My first experience of developing a full-stack application. Developed in a month with learning and launced the app on May 2020.

- Developed both backend and web frontend using Flask, Angular, MySQL and Azure App Directory
- Achieved over 1,000 installations of the note-taking app, sloos, in companies across Japan.
- Achieved Microsoft for Startups partnership
- 2021 Qore Cloud: a web-based no-code tool for fine-tuning RC models

Education

Master of Applied Science

University of Tokyo

☐ Apr 2019 — Mar 2022

Tokyo, Japan

Applied Computer Science

Bachelor of Arts

International Christian University

☐ Apr 2015 — May 2019

Tokyo, Japan

Information Science Major, Economics Minor Dean's List (GPA: 3.86/4)

Exchange Program

The University of Edinburgh

□ Sep 2017 − May 2018

P Edinburgh, UK

School of Informatics

Publications

- Artificial Neural Networks for Realized Volatility Prediction in Cryptocurrency Time Series ISNN 2019: Advances in Neural Networks 2019 (Full papers)
- An Intuitive Interface for Digital Synthesizer by Pseudointention Learning Audio Mostly 2019 (Full papers)
- prometheus: A mobile telepresence system connecting the 1st person and 3rd person perspectives continuously SIGGRAPH Asia 2022 (Poster)

Natural Languages

English (IELTS 6.5) / Japanese (Native)

Speaking

- · VimConf 2024
- neovimconf.live 2024
- TEDxYouth@Tokyo 2013

Tech Comunity Activities

vim-jp / Svelte Japan

Other Information

Visa Status

Work permission without restrictions in UK (spouse visa)