




Pyii Phyo Maung

Software Engineer · CS @ Kyoto University

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📍 Kyoto, Japan

EDUCATION

B.Eng., Computer Science (in progress) | Kyoto University Apr 2020 – Present
Faculty of Engineering, Informatics Dept.

- Relevant coursework: compilers, computer architecture, operating systems, algorithms, signal & image processing, digital logic design.
- Coursework projects in OCaml, Verilog, C, and Python (details under *Projects*).

High School Diploma | Yangon International School 2013 – 2019
Yangon, Myanmar

RESEARCH

Scaling MARL-CPC: Achieving Decentralized Coordination in Multi-Agent Environments | B.Eng. Thesis
Symbol Emergence Systems Lab (Prof. Tadahiro Taniguchi), Kyoto University

- Extended MARL-CPC — a variational Collective Predictive Coding framework for emergent communication in multi-agent RL — from single-round two-agent settings to multi-round message passing scaling to 3–5 agents.
- Proposed and compared two CPC loss strategies (*Final Round* vs. *Every Round*) on a non-cooperative Bandit coordination task; showed that dense per-round learning signal (*Every Round*) is essential as the number of agents grows.
- Implemented the full training + evaluation pipeline in PyTorch; ran 2–5 agent experiments across multiple seeds, producing learning-curve and final-reward comparisons against prior work.

EXPERIENCE

Software Engineer | Senren, Inc. Sep 2025 – Present
Japan · part-time, hybrid, concurrent with studies

- Full-stack feature development and browser automation on GCP.
- Day-to-day stack: Next.js / React on the front-end, FastAPI (Python) on the back-end, Playwright for automation, PostgreSQL on Cloud SQL, Cloud Run for orchestration.
- Ship code end-to-end: design, implement, deploy, observe, iterate.

English Tutor (Private) | Private one-on-one tutoring 2023 (approx. 6 months)
Kyoto — high school students

- One-on-one English tutoring for Japanese high-school students: reading comprehension, writing, and conversation practice, tailored per student.

Local Tour Host | City Unscripted Aug 2023 – Present
Kyoto, Japan

- Lead bespoke English-language walking experiences across Kyoto for international visitors.
- Plan routes on the fly around each guest's interests, pace, and weather.

Software Engineering Intern | Konica Minolta — tomoLinks Aug 2022
Tokyo, Japan

- Short-term internship on the tomoLinks EdTech platform for Japanese schools.

- Contributed to feature work and bug investigations alongside full-time engineers.

Hotel Staff | Mitsui Garden Hotel
Kyoto, Japan (part-time)

Sep 2022 – Jan 2023

Waiter | Sowaka — kaiseki restaurant at a ryokan in Gion
Kyoto, Japan

Oct 2022

- Waitstaff on the kaiseki floor at the Sowaka ryokan in Gion; operational keigo at service pace.

SELECTED PROJECTS

Rutilea Music | *Python, LLM, Multimodal*

github.com/austenppm/rutileamusic

- App that uses an LLM to pick music matching the mood of a given photograph; experiments with multimodal prompting and vibe-based retrieval.

OCaml Interpreter | *OCaml, PLT, Compilers*

github.com/austenppm/interpreter

- From-scratch interpreter for a subset of ML: lexing, parsing, type inference, evaluation.

SIMPLE CPU | *Verilog, Hardware*

github.com/austenppm/simpleausten

- Simple pipelined processor implemented in Verilog for Kyoto University's computer architecture course; runs a small custom ISA end-to-end.

Life Quest | *Flutter, Dart, Firebase*

- Life-gamification app that turns daily habits into an RPG — ten D&D-style stats, XP and streak tracking, AI-assisted stat detection, multi-step quest system.

Offline LaTeX Compiler | *Node.js, React, Monaco*

- Local, offline clone of Overleaf: split-pane Monaco editor with live PDF preview, file tree, drag-and-drop upload, auto-compile on save. Node / Express back-end, React front-end.

SKILLS

Languages	Python, OCaml, C, Java, TypeScript / JavaScript, Dart, SQL, Verilog
Frameworks	Next.js, React, FastAPI, Flutter, Express
Data & Infra	PostgreSQL, Firebase, GCP (Cloud Run, Cloud SQL), Docker, Git
Automation	Playwright, shell scripting, web scraping
Tooling	L ^A T _E X, Monaco, Linux, VS Code

LANGUAGES & CERTIFICATIONS

Languages	English (Fluent) · Burmese (Native) · Japanese (JLPT N1) · Spanish (Conversational) · Chinese (Basic)
Certifications	Japanese-Language Proficiency Test N1 — Aug 2023