

SKILLS

- **Programming:**

- **Rust:** My favorite programming language. Learning since 2019. See projects below for my Rust experiences.
- **Python:** My current goto language. Main development programming language at work and in research.

- **Development Experience:**

- **Microservices:** Building and transforming to microservices at the current company.
- **Cloud:** AWS: lambda, S3, EC2, API Gateway, and Quicksight.
- **Database:** Basic knowledge of SQL

- **Machine learning:** Reinforcement learning, developmental learning, neural networks (Doctor, Master's). Able to read and implement things from academic papers.

- **Networking:** Surface level of understanding. Experience of deploying private DNS and VPN in a small home-lab.

- **Learning skills:** Capable of adapting and learning new technologies quickly.

- **Languages:** Thai: Native, English: Proficient, Japanese: Intermediate (JLPT N2)

EXPERIENCE

- **QBIT Robotics**

Tokyo, Japan

Software Engineer

Mar 2019 - Present

- **Omotenashi Engine:** Design and implement the foundation of the Omotenashi Engine that is used in &robot café. Maintain and review the source code. (Python)
- **Robot Restaurant OS:** Refactor and transform the code base to microservices. It is the core of the &robot café, a robot coffee/drink server. (Python)
- **Other experiences:** Utilize the commonly available tools and practices: AWS services, CI/CD, Build Automation, Data Analysis, Event Sourcing, React, Django, Docker.

- **Japan Advanced Institute of Science and Technology**

Ishikawa, Japan

Research Assistant

Nov 2014 - Apr 2018

- **Japanese-German Collaborative Research on Computational Neuroscience: Autonomous Learning of Active Depth Perception: from Neural Models to Humanoid Robots:** The main goal of the research is to implement a biological inspired active depth perception framework for robots which is developmental and has the ability of self-calibration. Main components of the research were **sensory coding:** active efficient coding theory, **reinforcement learning**, and neural network. (MATLAB, V-REP, Python)

- **Sirindhorn International Institute of Technology, Thammasat University** Pathum Thani, Thailand

Teaching Assistant

May 2012 - May 2013

- **Lecture&Teaching:** Give lectures on basic electronics. Help and teach students on basic electronics, such as creating a circuit with various components. Help students to create a mobile application with Xcode in Mobile Application Programming Course. (Objective-C)

PROJECTS

- **Rust mini projects:** [github.com/zynaxsoft/{ mycraft-rs smol-webhook, secret-png, ray-tracing }](https://github.com/zynaxsoft/{mycraft-rs,smol-webhook,secret-png,ray-tracing}) and more.
- **<https://tanapol.dev>:** My website. Check github.com/zynaxsoft/tanapol.dev for some details. (JavaScript, Vue-cli, CSS, Docker, NGINX)
- **Drones:** Built Tri-copter and Quadrotor for projects in Bachelor's degree. They are built from scratch by using Arduino, XBee, IMU, ESC, and brush-less motor (MATLAB, C)

EDUCATION

- **Japan Advanced Institute of Science and Technology**

Ishikawa, Japan

- *Doctor of Philosophy (Ph.D.), Robotics, School of Information Science*

Oct 2015 - Dec 2018

Master's degree, Robotics, School of Information Science

Oct 2013 - Sep 2015

- **Sirindhorn International Institute of Technology, Thammasat University** Pathum Thani, Thailand

Bachelor's degree, Electronics and Communication Engineering

May 2009 - Apr 2013