Tanapol Prucksakorn

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https://tanapol.dev

Skills

- **Programming**:
  - **Rust**: My favorite programming language. Started since 2019. See projects below for my Rust experiences.
  - **Python**: My current goto language. Main development programming language at work and in research.
  - **C/C++**: Can read and understand average C and C++ code.
- **Development Experience**:
  - **Microservices**: Building and transforming to microservices at the current company.
  - **Cloud**: AWS: lambda, S3, EC2, API Gateway, and Quicksight.
  - **Database**: SQLite and 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**: Migrate the code base to microservices. It is the core of the &robot café, a robot coffee/drink server. (Python)
  - **Other experiences**: Create an API for controlling a robot arm. Refactor existing code to be more scalable and readable, Mentor juniors, 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 } 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*