Tanapol Prucksakorn

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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*

Experience

- **QBIT Robotics** — Tokyo, Japan
  - *Robotics Engineer (Software Engineer)* — *Mar 2019 - Present*
    - **Omotenashi Engine**: Lead the team and create the foundation of Omotenashi Engine. Maintain and review the source code. The engine uses machine learning (PyTorch) to predict a speech that would provide high hospitality to customers. (Python)
    - **Robot Restaurant OS**: Re-factored some of the existing codes to have higher readability and scalability. It is the core of the &robot café, a robot coffee/drink server. (Python)
- **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)
- **Sirindhorn International Institute of Technology, Thammasat University** — Pathum Thani, Thailand
  - *Teaching Assistant* — *May 2012 – May 2013*
    - **Basic Electronics Lecture**: Gives a lecture on basic electronics.
    - **Electronics Laboratory**: Helps and teaches students on basic electronics, such as connecting a circuit with various components.
    - **Mobile Application Programming Course**: Helps students to create a mobile application with Xcode (Objective-C)
- **Fabrinet CO.,LTD. Automotive Department** — Pathum Thani, Thailand
  - *Internship Student* — *Apr 2012 – Jun 2012*
    - **Quality Control Engineer**: Design a machine that detects a faulty part/spot of a car's LED headlight. Learn various kind of quality control related machines. Cooperate with the production line staffs.

Awards

- Japanese Government Scholarship Student (Monbukagakusho:MEXT) — *Oct 2014 – Oct 2018*
- Young Scientist and Technologist Program (YSTP), Scholarship recipient by National Science and Technology Development Agenda (NSTDA) — *May 2012 – May 2013*

Projects

- **Unmanned Aerial Vehicle (UAV) for Observing Landslide by using Quadrotor (2012-2013), UAV by using Tri-copter (2012)**: The projects were done as a graduation project and course project respectively. The projected focused on building the UAVs from scratch by using Arduino, XBee, IMU, ESC, and brush-less motor (MATLAB, C)

Skills

- **Languages**: Thai: Native, English: Proficient, Japanese: Intermediate (JLPT N2)
- **Programming Languages**: : Python, MATLAB, LaTeX, C, Java, PHP, C#
- **Miscellaneous**: GNU/Linux, Git, PyTorch, Docker, AWS, NGINX, Django

Publications

Journal Paper

Tanapol Prucksakorn, Sungmoon Jeong, and Nak Young Chong, "A Self-Trainable Depth Perception Method from Eye Pursuit and Motion Parallax,"Robotics and Autonomous Systems (2018) Vol. 109, pp. 27-37.

International Conferences

Tanapol Prucksakorn, Sungmoon Jeong, and Nak Young Chong, "A Joint Learning Framework of Visual Sensory Representation, Eye Movements and Depth Representation for Developmental Robotic Agents," in International Conference on Neural Information Processing, 2017 (pp. 867-876). Springer, Cham.

Tanapol Prucksakorn, Sungmoon Jeong, Jochen Triesch, Hosun Lee, and Nak Young Chong, "Self-calibrating active depth perception via motion parallax," in Development and Learning and Epigenetic Robotics (ICDL-EpiRob), 2016 Joint IEEE International Conference on (pp. 103-108). IEEE.

Tanapol Prucksakorn, Sungmoon Jeong, and Nak Young Chong, "Joint learning for smooth pursuit eye movement and moton parallax through active efficient coding," in Ubiquitous Robots and Ambient Intelligence (URAI), 2015 12th International Conference on (pp. 458-459). IEEE.

Tanapol Prucksakorn, Kriangkrai Wachirarattanakornkul, and Itthisek Nilkhamhang, "Unmanned aerial vehicle for observing landslide with iterative feedback tuning," in Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2013 10th International Conference on. IEEE, 2013, pp. 1-5.