

PONGSAKORN U-CHUPALA

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EDUCATION

Nara Institute of Science and Technology
Nara, Japan (2013-2018, *scheduled*)

- Doctor of Engineering, Computer Science, Graduate School of Information Science
- Master of Engineering, Computer Science, Graduate School of Information Science (GPA: 4.00)

Kasetsart University
Bangkok, Thailand (2008-2013)

- Bachelor of Engineering, Computer Engineering, *Cum Laude* (GPA: 3.54)

AWARDS AND QUALIFICATIONS

- 990 Points, TOEIC IP, June 2015
- 101 Points, TOEFL iBT, October 2012
- Level N3, Japanese Language Proficiency Test, September 2012
- "Good" Rank, The 1st POSN National Computer Olympiad Competition, 2005

EXPERIENCE

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| 2017 | <ul style="list-style-type: none">• Internship at Information Technology Research Institute, AIST, Japan |
| 2014 | <ul style="list-style-type: none">• Visiting Scholar at CallT2, University of California San Diego, United States |
| 2013 | <ul style="list-style-type: none">• External Researcher at HPCNC Laboratory, Kasetsart University, Thailand• Developer at Innovative Extremist Co., Ltd. |
| 2012 | <ul style="list-style-type: none">• Google Student Ambassador SEA, Google Inc.• Outsourced Developer for Onebit Matter Co., Ltd.• Outsourced Developer for Diversition Co., Ltd. |
| 2011 | <ul style="list-style-type: none">• Exchange Student in FrontierLab@OsakaU Program, Osaka University, Japan |
| 2009-2010 | <ul style="list-style-type: none">• Part-time Developer at Thoth Media Co., Ltd. (now Thoth Social Co., Ltd.) |

SCHOLARSHIPS

- MEXT Scholarship (2015-present)
- JASSO Scholarship (2011-2012)

NOTABLE PROJECTS

- **GainViz (2017)**: Web-based visualization tool for Gainesville city's open-data. Best hack award, CENTRA2 Student Hackathon.
- **Applying Deep Learning to Network Traffic Identification and Categorization (2016-present)**: The CAIDA Internet traffic dataset is analyzed with stacked denoising autoencoder implemented with TensorFlow. A part of the development an automatic network enhancing cycle with application-aware routing. Also a part of Creative and International Competitiveness Project (CICP2016) supported by NAIST.
- **Container Rebalancing (2015-2017)**: A novel scheduling mechanism with a rebalancing processing working alongside a scheduling process. A Hadoop/Hive-powered data processing technique and a Python-based simulation using Google's cluster data is performed to validate this method.
- **PRAGMA-ENT (2014-present)**: Breakable international SDN testbed for PRAGMA community. Shared administration responsibility over sites at NAIST, Osaka University, University of California San Diego and University of Florida.
- **Overseer: Application-Aware Routing (2013-present)**: OpenFlow controller for bandwidth and latency aware routing implemented with POX. Master's thesis.
- **PRAGMA Boot (2013-2014)**: A program to instantiate VM in PRAGMA's cloud. Responsible for OpenNebula plugin written in Ruby.
- **eCOSTamp (2013-2014)**, Electronics collectible stamp platform combining web service, smartphone application and 3D-printed Arduino-based hardware. Part of Creative and International Competitiveness Project (CICP2013) supported by NAIST.
- **Nyanlive (2013)**: A complete solution for creating and maintaining video streaming platform. Responsible for streaming authentication/authorization system and the internal API implemented with Django.
- **ByteArk (2013)**: S3-compatible SEA-based CDN. Part of the team responsible for the internal API.
- **Knowbita (2013)**: Online lecture archive of department of computer engineering, Kasetsart University. Responsible for the internal API implemented with Django.
- **OBVOC (2012)**: Social media monitoring platform. Responsible for the early version of social media data collection using Python.
- **Kpiology (2010)**: Social media analytics platform. Responsible for the early version of Twitter™ data collection and analytics using Python.
- **Change (2010)**: Web-based multiplayer game inspired by Civilization™ written with Django and jQuery. The 3rd place in Web Contest section, National Software Contest (NSC) 2010.
- **Justwords (2007)**: Online quote repository written in PHP with Doctrine and self-developed MVC framework. Best technical award, INET Young Webmaster Camp 6.
- **The Zenith (2005)**: Scrolling shooter game. Consolidation award in Entertainment section, National Software Contest (NSC) 2005.

PUBLICATIONS (FIRST AUTHOR)

- [P. U-chupala](#), Y. Watashiba, K. Ichikawa, S. Date, and H. Iida, "Application-aware network: network route management using SDN based on application characteristics," *CSI Transactions on ICT*, pp. 1–11, 2017.
- [P. U-chupala](#), Y. Watashiba, K. Ichikawa, S. Date, and H. Iida, "Container Rebalancing: Towards Proactive Linux Containers Placement Optimization in a Data Center," in *The 41th IEEE Computer Society International Conference on Computers, Software & Applications (COMPSAC)*, 2017.
- [P. U-chupala](#), K. Ichikawa, H. Iida, N. Kessaraphong, P. Uthayopas, S. Date, H. Abe, H. Yamanaka, and E. Kawai, "Application-Oriented Bandwidth and Latency Aware Routing with OpenFlow Network," in *The 6th IEEE International Conference on Cloud Computing Technology and Science (CloudCom)*, 2014.
- [P. U-chupala](#), P. Uthayopas, K. Ichikawa, S. Date, and H. Abe, "An implementation of a multi-site virtual cluster cloud," in *The 2013 10th International Joint Conference on Computer Science and Software Engineering (IJCSSE)*, 2013, pp. 155–159
- [P. U-chupala](#), K. Ichikawa, H. Abe, S. Date, and S. Shimojo, "A Virtual Cluster Manager using a Hierarchical Management Model for Cloud Infrastructure," in *The 6th International Conference on Ubiquitous Information Technologies and Applications (CUTE)*, 2011.

AFFILIATIONS

- PRAGMA Student Steering Committee (2015-present)
- Software Design and Analysis Laboratory (2013-present)
- Google Developer Group Thailand (2012-present)
- Cybermedia Center, Osaka University (2011-2012)
- High Performance Computing and Networking Center, Kasetsart University (2010-2013)

SKILLS

- Web Technology and Web Development
- Computer Networking
- Software-Defined Networking and OpenFlow
- HPC, Cluster Computing and Virtual Cluster
- Cloud Computing
- Virtualization and Virtual Machine
- Linux Containers (including Docker)
- Linux Administration
- Data Science and Big Data Analysis
- Machine Learning (including Deep Learning with Tensorflow)
- Programming Languages (ordered by proficiency): Python (including Django), C++, PHP, JavaScript
- Languages: Thai (Native), English (Business Proficiency), Japanese (Limited Proficiency)

LINKS

- Profile Page: puchupala.com
- Github: github.com/KnightBaron
- LinkedIn: [linkedin.com/in/puchupala](https://www.linkedin.com/in/puchupala)
- ORCID: orcid.org/0000-0002-8952-661X