TOSSAPORN (TREE) SAENGJA

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SHORT BIO

Five years' experience in research, industry, and teaching. Developed advanced models and led teams.

EDUCATION

Massachusetts Institute of Technology

Masters of Engineering in Computer Science and Engineering	4.8/5.0	*2019-2020*
Bachelor of Science in Computer Science and Engineering	4.8/5.0	*2015-2019*

AWARDS

85th, Bronze, International Olympiad in Informatics 2013 (IOI) from 299 contestants over 77 countries

EXPERIENCE

Vision and Learning Lab, VISTEC *Research Assistant*   2023-Present

· Worked on collocation problem of real images by distilling prior knowledge (Score Distillation Sampling) from the stable diffusion model
· Experimented on memorization of diffusion models with CIFAR-10 dataset

PreceptorAI, CARIVA, *AI Consultant*   2023-Present

· Developed and deployed, in collaboration with Siriraj Radiology Department, a multi-label (muscle, fats) segmentation model (nnUNet, 0.98 Dice) for vertebrae L3 in MRI images (Pytorch)
· Developed, in collaboration with Siriraj Radiology Department, a generative model (diffusion) for chest X-ray images (Pytorch)

Mahidol Wittayanusorn High School, *Computer Science Teacher*   2020-2023

· Coached students to represent Thailand in the IOI 2022
· Taught multiple subjects including data science (Python), special topics (HTML, CSS, React, Blockchain), Computer Olympiad (C++), basic Python
· Advised twelves year-long projects, mostly in machine learning area

Agnos, *Technical Cofounder*   2019-2023

· Worked with physicians to develop a medical question system for diagnosis (Python, Django) (130k diagnosis records, 50k active users)
· Led multiple teams: Data Science (Redash), AI, Growth
· Team raised fund in Shark Tank Thailand S3 for 30M baht

Facebook, Notification Backend, *Intern*   2017

· Implemented a production pipeline for network effect prediction models, both classification and regression, using HiveQL and FBLearner Flow within Facebook's machine learning framework

MIT Media Lab, Human Dynamics   2018–2020

· **Learning Quadratic Games on Large-Scale Network**
  Prepared large-scale, real-word datasets for optimization framework to learn the underlying network structure and individual marginal benefits