

Chatdanai Lumdee, PhD

A lifelong learner. Personal website clumdee.github.io.

Professionally trained in optics and nanophotonics. Authored articles in leading peer-reviewed journals -- [link](#).

Self-taught programmer and data scientist. Leading a data science team at the most celebrated startup in Thailand.

Doing web-development and scientific simulation in my free time -- [examples of scientific simulation](#).

WORK

Senior Data Science Manager

05/2022 – present

Data Science, LINE MAN Wongnai – Bangkok, Thailand

- Lead a team of data scientists and drive continuous impact across business domains measured by experiment
 - Ad serving: develop pricing strategy for long term ad revenue, improve conversion with ML models
 - Demand-supply management: balance users and riders in real-time in normal and unusual events
 - Food and mart on-demand delivery: improve search recall using prefix-tree based and ML classification, improve conversion with ML models

Tech-stack owner (and everything non-dental)

12/2024 – present

Smile Stories Dental Clinic (family-owned) – Bangkok, Thailand

- Build and maintain customer management and advertising solutions with Google Sheets and Apps Script
- Responsible for content creation for online marketing by leveraging generative AI
- Train internal staff to utilize tech tools to improve operational efficiency

Webmaster and Financial Advisor

10/2020 – present

Certified Investment Consultant by the Securities and Exchange Commission, Thailand

- moneysart.com, providing tools for financial planning taking multiple top-5 Google search results
- Manage > 40 clients under affiliation with [Finnomena](#), utilizing tech tools to help automate tasks

Data Scientist

Data Science, Agoda (part of Booking Holdings) – Bangkok, Thailand

08/2019 – 05/2022

Applied Intelligence, Accenture Digital, Accenture – Bangkok, Thailand

09/2018 – 08/2019

KLabs, Kasikorn Business-Technology Group (KBTG) – Bangkok, Thailand

11/2017 – 08/2018

- Anomaly detection: researched and implemented algorithms enabling more timely and less false positive alerts, including reducing detection time to 1 min
- Fraud prevention: developed multiple machine learning models saving >1M USD annually
- Machine lending: coordinated with cross-functional team members to launch one of the first ML-based lending recommendations in Thailand
- Personal investment: built an investment recommendation model for the largest mobile banking app in Thailand

Research Scientist (Postdoc and PhD)

Department of Physics, University of Gothenburg/Chalmers – Gothenburg, Sweden

04/2016 – 10/2017

CREOL/The College of Optics and Photonics – Orlando, Florida, USA

08/2010 – 01/2016

Theme: optical interactions at the nanoscale – nanophotonics, plasmonics, nanomagnetism

Links to [publications](#) and [presentations](#)

- Designed and set up microscopy and spectroscopy experiments of single nanoparticles and nanoparticle arrays
- Performed numerical 3D electromagnetic simulation to verify and supplement findings from experiments

EDUCATION

Ph.D. in Optics and Photonics

08/2010 – 12/2015

CREOL/The College of Optics and Photonics, University of Central Florida – Orlando, Florida, USA

B.Eng. in Nano-engineering

08/2006 – 05/2010

Chulalongkorn University – Bangkok, Thailand