

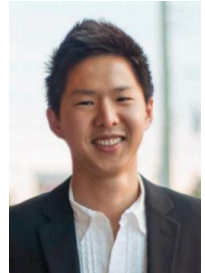
Chatdanai Lumdee, PhD

-- A lifelong learner. Physicist and data scientist. Building his mastery towards advanced-tech society.
-- Website: clumdee.github.io

SUMMARY

Chatdanai started his career as an optical scientist with specialization in nanophotonics. He is proficient with various optical characterization techniques especially microscopy and spectroscopy. His research work covered both experimentation and numerical simulation which produced a record of publications in top-tier scientific journals and presentations at international conferences.*

He later developed proficiency in data science and analytics, together with working knowledge in web development.** His expertise leads him to join top tech firms in Southeast Asia across different fields.



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

**Some side projects on [website](#) and [GitHub](#)

TECHNICAL STACKS

Data Analytics: Python, SQL, Matlab, Origin, Excel, PowerBI, Grafana, Metabase, ...

Web Dev: HTML, CSS, Javascript, Bootstrap, Flask, Dash

Others: Optical experiment and simulation, nanofabrication, materials characterization, hardware system control
Native Thai and fluent in English

EXPERIENCE

Senior Analytics Research Manager 05/2022 – present
Growth Team, LINE MAN Wongnai – Bangkok, Thailand

- **Generalized forecast engine**
 - Own and lead the whole system implementation from database, algorithm, to web-app dashboard

Software Engineer (part-time) 01/2022 – present
Owner of a tech stack, Channa (my sister's store and cooking studio) – Bangkok, Thailand

- Develop and maintain website - channalivewell.com
- Build and maintain business solutions by using Google Apps Script to connect Forms, Sheets, Mail, etc.

Independent Financial Advisor (part-time) 11/2020 – present
[Certified Investment Consultant](#) by the Securities and Exchange Commission, Thailand

- Manage > 30 clients under affiliation with [Finnomena](#)
- Create moneysart.com, providing web-based tools to help financial planning

Data Scientist 08/2019 – 05/2022
Data Science, Agoda (part of Booking Holdings) – Bangkok, Thailand

- **Anomaly detection service**
 - Led algorithm research and prototyping including getting detection time down to 1 minute

- **Fraud prevention**
 - Led development of multiple machine learning models that save >1M USD annually

Data Scientist (Digital Consultant)

09/2018 – 08/2019

Applied Intelligence, Accenture Digital, Accenture – Bangkok, Thailand

- **Digital Lending (Analytics Workstream)**, Leading Thai Bank
 - Supported analytics work such as integrating 3rd party data, project planning and optimization
 - Served as an analytics contact point for operation personnel up to management

Data Scientist

11/2017 – 08/2018

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

- **Personal Investment Recommendation:** Built a machine learning model to integrate with Kplus. Offering the 1st national scale app-based intelligent mutual fund recommendation to > 8M users.

Research Scientist (Postdoctoral)

04/2016 – 10/2017

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

- **Next Generation Data Storage Technology (magnetoplasmonics, nanomagnetism):** Explored the interplay between nanoscale optics and magnetism with the aim to develop a technological platform for the next generation of data storage units (European Union's EU Horizon2020 program).

Research Scientist (PhD Candidate)

08/2010 – 01/2016

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

- **Optical Interactions at the Nanoscale (nanophotonics, plasmonics):** Designed experiments and simulations to study plasmon resonances at single-nanoparticle level. This field is the core foundation of several emerging technologies including single-molecular sensing, surface enhanced photocatalysis, and heat-assisted magnetic recording.

EDUCATION

Ph.D. in Optics and Photonics (GPA: 3.95/4.00)

08/2010 – 12/2015

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

B.Eng. in Nano-engineering (GPA: 3.91/4.00)

08/2006 – 05/2010

Chulalongkorn University – Bangkok, Thailand