Last Updated: 18 November 2023

Curriculum Vitae

Name Kittapat Ratanaphupha

Physical Address 117/32 Lad Prao 18, Lad Prao Rd.

Chom Phon, Chatuchak, Bangkok

Postal Code: 10900

Email Addresses (Personal) boss kittapat@hotmail.com

(Big Data Institute) kittapat.ra@depa.or.th

(Chulalongkorn University) 6570152423@student.chula.ac.th

Education

Academic Year 2022 – Present **MSc Mathematics**

Chulalongkorn University

Thesis Title (Tentative)

On The Phenomenon of Global Warming Potential through Non-Local Reaction-

Diffusion Systems over Manifolds

Academic Year 2018 – 2021

BSc Health Data Science

Joint Degree between

The Computer Engineering Department, King Mongkut's University of Technology

Thonburi and

Princess Sri Savangavadana College of Medicine, Chulabhorn Royal Academy

Senior Project Title

Analysis of Genotype-Phenotype-Environment Association Problem within Cassava

Storage Roots Metabolic Reaction Network

Specialties

Information Technology

Data science, information management and information technology-related public policy

Mathematics

Partial differential equations, mathematical logic and theoretical computer science

Employment

Jun 2022 - Present

Data Scientist

Big Data Institute (Public Organization)

Former name: Government Big Data Institute, Digital Economy Promotion Agency

Responsibility

Environment-Link (ENVI-LINK): Environmental Government Data Platform

Design a data architecture for supporting an interoperability of governmental agencies and analytics for environmental issues

Health-Link: National Health Data Platform

Transform a data stored in a hospital information system to central platform with complying HL7-FHIR standard

Other Data Science Roles

- Gather a data for analytics with several methodologies, e.g., REST API, Web scraping
- Collaborate to develop a dashboard for agricultural data that supports THAGRI which is under the umbrella of the BCG economy action plan
- Develop a survival model to predict chronic kidney disease progression risks with collaboration of the National Health Security Office (NHSO)
- Collaborate to develop a web application for reporting the result of the 2023 Thai general election, accessible via www.ectreport.com
- (Under development) Develop the amalgam used in tooth-filling data report with Department of Health, Ministry of Public Health

Research and Development

Find out for evidence to report feasibility analyses to the above projects. Research topics:

- National data platform and open government framework
- Legal and standard compliance with related to data
- Data analytics methodologies
- Climate science
- Hospital information management

Page 2 Last Updated: 18 November 2023

Publication

Academic Publication

Saksilpa Srisukson, Kittapat Ratanaphupha, Sikarin Yoo-Kong (2018) "Hamiltonian Zoo for systems with one degree of freedom", ArXiv: 1802.06370

Open Articles

Series: Archives Challenges in Big Data Era (June 2023)

Accessible via https://bigdata.go.th/movements/archives-challenges-in-big-data-era-1/

Political Movements over Digital Economy: Case Studies on European Union, United Kingdom, and United States

Under review of the editorial board

Experience

Academic Experience

Jun 2017 - Jan 2018 Mathematical Physics Research

Collaborate with Asst. Prof. Sikarin Yoo-kong and Saksilpa Srisukson

King Mongkut's University of Technology Thonburi

Related Works ArXiv: 1802.06370

Work Experience

Occasionally **Graphic Designer Freelancer**

[Internship] Work-integrated learning Ramathibodi Hospital Jun - Aug 2021

Visualizing a data for rational drug use in the University hospital network (RDU

UHosNet)

Jun - Jul 2020 Internship

Government Big Data Institute, Digital Economy Promotion Agency

Analyze a social network data with collaboration of the Department of Revenue

Jan 2019 -Work Collaboration on Curriculum Development

Sept 2020

Darunsikkhalai Science School (Engineering Science Classroom)

Analyze a textual data for finding approaches to conduct an interdisciplinary

Analyze a curriculum framework and the educational thought, Constructionism

Propose an approach for conducting andragogy to high school students

Design a plan for the school's digital transformation

Teaching Experience

| 26 Jul 2023 | Basic Big Data lecture for the National Broadcasting and Telecommunications Commission (NBTC) Office |
|--------------|--|
| 30 Jan 2023 | Geospatial Data Science lecture in the Super AI Engineer 2022 Level 2 |
| 20 Sept 2022 | On the job training with the Department of Land Development: THAGRI API and its utilization |
| 9 Nov 2021 | Discrete Fourier Transform lecture in the Numerical Methods II King Mongkut's University of Technology Thonburi |
| Jul 2023 | On the job training with the Department of Revenue: Web scraping |

2018 - 2019 Teaching Assistant in General Physics course and website development

King Mongkut's University of Technology Thonburi