

Kittapat Ratanaphupha

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Related Topics

Interests on Mathematics

- Geometric Analysis
 - Geometric Measure Theory
 - Yamabe Problem
- Proof assistant and proof theory

CS, DS and technology specialties

- Signal processing
- Geospatial data analysis
- Data visualization and web application development

Others

- Legal analysis
- Data governance
- Philosophy of History, 17–19th century Thai History enthusiast

Education

- **Undergraduate (August 2018 – May 2022):** BSc Health Data Science, Joint degree with Computer Engineering, King Mongkut's University of Technology Thonburi and Princess Srisavangavadana College of Medicine, Chulabhorn Royal Academy (Bangkok, Thailand)
- **Master's degree (August 2022 – Present):** MSc Mathematics, Chulalongkorn University (Bangkok, Thailand)

Project and Thesis

- **Undergraduate:** Analysis of Genotype-Phenotype-Environment Association Problem within Cassava Storage Roots Metabolic Reaction Network
 - **Advisor:** Asst. Prof. Dr. Santitham Prom-On
 - **Co-advisor:** Assoc. Prof. Dr. Treenut Saithong
 - **Co-advisor:** Asst. Prof. Dr. Saowaluk Kanlapanulak

- **Master's:** TBD

Honors and Scholarship

- (August 2018 – May 2022) Received fully funded scholarship on BSc Health Data Science
- (August 2018) Course exemption on General Physics for Engineering Students I
- (January 2019 – December 2019) Honors program on multivariable calculus, vector calculus and general physics
- (July 2019) Awarded for academic excellency by above 3.50 GPAX on 4.00 scale

Publications

Academic article

- TBD

Open article

- (Tentative) “Strongly relation between Information science and data management”

Experiences

Research experience

- (June 2017 – January 2018) Mathematical Physics Research
 - Colleagues: Asst. Prof. Dr. Sikarin Yoo-Kong and Saksilpa Srisukson, King Mongkut's University of Technology Thonburi.
 - Project: arXiv: 1802.06370

Work experience

- (Occasionally) Freelance Graphic Designer
- (January 2019 – September 2020) Curriculum design team
 - Place: Darunsikkhalai Science School
 - Natural Language Processing task for analyzing an interdisciplinary course design
 - Framework analysis on the curriculum and constructionism in aspect of education
 - Literature review and feasibility analysis on andragogy methods
 - Data transformation project design for the school
- (June 2020 – July 2020) Extracurricular internship
 - Workplace: Government Big Data Institute (GBDi), Ministry of Digital Economy and Society, Thailand

- Project: Text analytics on social network data with collaboration of Department of Revenue, Ministry of Finance
- (June 2021 – August 2021) Summer Internship
 - Workplace: Ramathibodi Hospital, Thailand
 - Project: Data visualization for rational use of medicines by using prescription data

Employment

- (June 2022 – Present) Government Data Scientist
 - Workplace: Government Big Data Institute (GBDi)
 - Agricultural Sector:
 - * (Jun 2022 – Present) Data visualization on agricultural data in THailand AGRICultural data platform (THAGRI)
 - * (Aug 2022) Complex API calling for DINDEE and THAGRI project (Land development department)
 - * (Aug 2022 – Present) BCG Ratchaburi project on coconut (Design, Research, and Surveying)
 - Public Health Sector
 - * (2022 – Present) ETL techniques on HIS data for interoperability (follows HL7-FHIR)
 - * (Jan 2023 – Mar 2023) Web server for testing ETL process on HIS data
 - * (Sep 2022 – Present) Survival analysis on end-stage renal disease patients
 - * (Sep 2022 – Present) Call center dashboard on NHSO, Thailand
 - Other sectors
 - * (Sep 2022) Web scraping on E-commerce data
 - * (Mar 2023 – May 2023) ECT report: constituencies map, JSON ingestion

Teaching Experience

- (2018 – 2019) Teaching Assistant in general physics and website development
- (Mid-Jul 2020) Teaching Assistant in on the job training with Department of Revenue, Thailand
- (9 Nov 2021) Discrete Fourier Transform and its application on Numerical Methods II class
- (20 Sep 2022) On the job training; basic THAGRI API usage and applications in business intelligence
- (30 Jan 2023) Super AI engineer; Geospatial data science (Geospatial EDA, Concurrency, Geospatial visualization)