# Thamolwan Poopradubsil

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#### **EDUCATION**

# M.S. Computer Science and Information Engineering

2021

National Central University

Taoyuan, Taiwan

Thesis: Context-Aware Question-Answer Pairing and Dialogue Act Tagging from Instant Message Chatlog

## **B.S. Computer Science, First Class Honors**

2019

Kasetsart University *GPA:* 3.88/4.00

Bangkok, Thailand

## **PUBLICATIONS**

ScanClimatePolicy: A Framework for Analyzing Sectoral Climate Policies and Their Environmental Impact

**Thamolwan Poopradubsil**, Panon Latcharote, Tipajin Thaipisutikul *Under submission* 

IntelliMatch: Translating Research Intentions into Precision Dataset Recommendations with Contrastive Learning and LLM Re-Ranking

Thamolwan Poopradubsil, Tipajin Thaipisutikul

Under submission

**Question-Answer Pairing from IM Conversations via Message Merging and Reply-to Prediction** 

Thamolwan Poopradubsil, Chia-Hui Chang

PACLIC 2022 [paper]

Chat-log Disentanglement via Same-Thread Classification and Direct-Reply Prediction Chia-Hui Chang, ZhiXian Liu, **Thamolwan Poopradubsil**, Yu-Ching Liao, Yu-Hao Wu *PACLIC 2022* [paper]

Antibody Watch: Text mining antibody specificity from the literature

Chun-Nan Hsu, Chia-Hui Chang, **Thamolwan Poopradubsil**, Amanda Lo, Karen A. William, Ko-Wei Lin, Anita E. Bandrowski, Ibrahim Burak Özyurt, Jeffrey S. Grethe, Maryann E. Martone.

PLoS Computational Biology 2021 [paper]

#### RESEARCH EXPERIENCE

**Independent Researcher**, advised by Dr. Tipajin Thaipisutikul *Faculty of ICT, Mahidol University* 

Nov. 2023 – Present

Nakhon Pathom, Thailand

- Analyzed sector-specific climate policies in *ScanClimatePolicy* across key sectors like Energy, Transportation, and Infrastructure, focusing on policy effectiveness.
- Developed a framework emphasizing context-specific strategies to improve climate policy impact on GHG emission reduction.
- Created dataset recommendation systems for the *IntelliMatch* project using sentence-based searches and large language models.
- Enhanced dataset retrieval efficiency and user experience by improving traditional search methods.

## **Graduate Student**, lab of Dr. Chia-Hui Chang

Sep. 2019 – Jul. 2021

Computer Science and Information Engineering, National Central University Taoyuan, Taiwan

- Developed a reply-to prediction model for instant messaging platforms, improving message merging and Q&A pairing.
- Enhanced dialogue act tagging with BERT for better contextual understanding, integrating it into a retrieval-based chatbot for answer selection.
- Applied SciBERT for antibody classification, advancing biomedical text mining.

**Undergraduate Student**, supervised by Dr. Chakrit Watcharopas Co-Advisors: Dr. Usa Sammapun and Dr. Ruj Akavipat

Jan. 2019 - June 2019

Department of Computer Science, Faculty of Science. Kasetsart University Bangkok, Thailand

- Developed a deep learning system for autonomous vehicles as part of the thesis Self-Driving Car using Imitation Deep Learning, to imitate human driving behavior in a car simulator.
- Constructed a dataset from CARLA (autonomous vehicle driving simulator) and augmented the data for training.

### **TEACHING EXPERIENCE**

**Teaching Assistant**, Computer Science, Kasetsart University *Algorithm Design and Analysis* 

2018

• Designed lab quizzes, including questions and answer keys, for each algorithm lesson, ensuring comprehensive understanding and assessment of key concepts.

### **HONORS & AWARDS**

# **MOE Taiwan Scholarship Directions for Thai Students**

2019 - 2021

Fully funded, covering tuition and a monthly stipend.

Awarded the fully-funded MOE Taiwan Scholarship, granted to top Thai candidates based on academic merit and competitive selection.

## **Certificate of Academic Excellence**

2017, 2018

Recognized for maintaining high academic standing at Kasetsart University.

# **KU King Bhumibol Scholarship (Excellent Academic Achievement Award)**

2017

Awarded to the top 5 students in each faculty at Kasetsart University based on academic performance.

#### PROFESSIONAL EXPERIENCE

## **Machine Learning Engineer**

Sep. 2021 - Apr. 2024

Appman Co, Ltd.

Bangkok, Thailand

- Developed and deployed information extraction models for automating data extraction from OCR outputs in image documents.
- Built a Thai-English machine translation system using the BART model, enhancing spoken language translation.
- Created a grounded chatbot for sales scenarios, utilizing large language models for accurate, knowledge-based responses.

## **PRESENTATIONS**

Oral Presentation, "Question-Answer Pairing from IM Conversations via Message Merging and Reply-to Prediction", PACLIC 2022, 2022, Online.

Oral Presentation, "Chat-log Disentanglement via Same-Thread Classification and Direct-Reply Prediction", PACLIC 2022, 2022, Online.

#### LEADERSHIP

## **President of KU Computer Science Students**

2018

Led student activities and coordinated academic events for the computer science department.

## **EXTRACURRICULAR ACTIVITIES**

NCU's Badminton Athlete/University Games of Taiwan	2020, 2021
KU's Badminton Athlete/University Games of Thailand	2017, 2018

## **REFERENCES**

Dr. Tipajin Thaipisutikul – Faculty of ICT, Mahidol University

Email: tipajin.tha@mahidol.edu

Dr. Chia-Hui Chang - Computer Science and Information Engineering, National Central

University

Email: chiahui@g.ncu.edu.tw

Dr. Chakrit Watcharopas – Computer science, Kasetsart University

Email: chakrit.w@ku.th