

# WARALAK PARIWATPHAN

 062-581-1940  waralak.par@gmail.com  <https://www.linkedin.com/in/waralak/>  <https://github.com/waralak>

## SUMMARY

Dedicated and adaptable professional with expertise in implementing LLMs, machine learning, and deep learning for NLP, seeking to leverage my skills and knowledge in a challenging environment. Committed to delivering impactful results through hard work and continuous growth.

## EDUCATION

**Skolkovo Institute of Science and Technology (Skoltech)** – Moscow, Russia Dec 2021 - Oct 2023  
*Master of Science in Data Science, G.P.A. 4.58/5.00*  
Scholarship: H.R.H. Princess Maha Chakri Sirindhorn Skoltech Master of Science Scholarships

**Chulalongkorn University** – Bangkok, Thailand Aug 2016 - May 2020  
*Bachelor of Science in Statistics (Insurance), G.P.A. 3.64/4.00 (1st Class Honors)*  
Scholarship: Chulalongkorn Alumni Scholarship

## WORK EXPERIENCE

**ViaLink** – Bangkok, Thailand May 2024 - Now  
*Data Scientist*

- Develop and continuously optimize advanced Language Models (LLMs) to drive automated workflows for efficient data analysis, encompassing data retrieval, cleaning, and analysis.
- Design and implement a chatbot leveraging Retrieval-Augmented Generation (RAG) techniques, driving significant enhancements in customer experience through intelligent and contextually relevant interactions.

**Pornsirikul School** – Trang, Thailand Aug 2020 - Apr 2021  
*Mathematic Teacher*

- Taught secondary students and provided guidance as an advisor for independent self-study, fostering a conducive learning environment.
- Conducted research on thinking tools and prepared reports summarizing their effectiveness in improving students' study efficiency throughout the semester.

## INTERNSHIP

**Quicktoken Ltd.** – Moscow, Russia May 2022 - Jun 2022  
*Data Scientist Intern*

- Collected and processed peer-to-peer lending data from MakerDAO using APIs, then analyzed the dataset to estimate economic parameters and provide insights into the platform's performance.
- Implemented tokenization techniques for efficient data representation and manipulation on the blockchain, and demonstrated the workflow on the blockchain.

**AIA Group Ltd.** – Bangkok, Thailand Dec 2019 - Feb 2020  
*Actuarial Intern (Pricing)*

- Developed VBA scripts to improve weighted average estimates for more accurate insurance premium calculations and analyzed claim ratios to provide actionable insights for the Office of Insurance Commission (OIC) to enhance pricing strategies.
- Conducted sample annual internal audits to ensure the accuracy and competitiveness of underwriting team pricing.

**Ocean Life Insurance Public Company Ltd.** – Bangkok, Thailand Jun 2019 - Jul 2019  
*Actuarial Intern (Pricing)*

- Created pricing tables and utilized VBA to automate pricing calculations, resulting in increased efficiency and accuracy in the pricing process.
- Developed a new product for a target market and calculated insurance premiums based on actuarial risk analysis.
- Collaborated with cross-functional teams to ensure product alignment with customer needs and strategy requirements.

*Category Executive*

- Executed and implemented a comprehensive marketing strategy in the Kid, Toy, and Education category team, achieving a total revenue goal of 100,000 THB within three months.
- Communicated and negotiated with suppliers and customers to optimize product offerings and enhance profitability.
- Conducted market research and competitor analysis to identify growth opportunities and adapt marketing tactics.

**CERTIFICATES AND AWARDS**

- **MS Power BI for Business Analytics** Jun 2021  
Project: Brand Awareness for 18-8-8 Fertilization
- **Essentials of Artificial Intelligence (AI) and Data Science for Business** May 2021  
*granted by Going Pro to Data Scientist Program (Faculty of Science, Prince of Songkla University)*
- **Final Five Teams of OIC InsurTech Award 2019** Sep 2019  
*granted by Office of Insurance Commission (Thailand)*

**EXTRACURRICULAR ACTIVITY**

**Quick Success: Blockchain Programming (Innovation Workshop 2023) – Moscow, Russia** Sep 2023

*Teaching Assistant*

- Contributed to workshop materials by preparing materials, coding procedures, and deploying smart contracts.
- Worked closely with the instructor to ensure an effective and engaging learning environment.
- Provided essential student assistance through timely Q&A sessions, concise explanations, and group discussion facilitation.

**RELEVANT COURSEWORK****Master's Thesis: Portfolio Sold-Out Problem in Numbers for DeFi Lending Protocols**

- Collected raw data from MakerDAO, a well-known DeFi lending platform, using BigQuery and integrating with Web3 to transform unstructured data into legible data before preparing the data for the optimization stage.
- Calculated economic parameters (e.g., PD, LGD), proved theorems regarding the second-order cone program and the NP-hard problem, performed optimization models on the dataset, and evaluated performance.

**Task Completion in CodaLab about Deep Learning for Natural Language Processing**

- Performed machine learning and deep learning techniques to complete three tasks in CodaLab: Transliteration, Argument Mining, and RUSSE 2022 Russian Text Detoxification Based on Parallel Corpora.

**Movie Recommendations using NeuralCF and DeepFM for Warm Start Scenario**

- Applied the CoFFee model, a tensor-based approach, to retrieve important information in warm-start scenarios.
- Trained the NeuralCF and DeepFM models and combined with CoFFee's suggestions to predict the recommendations.

**Deblurring Images Using SVD**

- Proposed a technique for recovering image information (deblurring) using singular value decomposition (SVD).
- Demonstrated the technique's performance with various levels of rank for both grayscale and color images.

**Boosting for Fairness-Aware Classification**

- Reproduced the AdaFair algorithm, which is based on AdaBoost, in order to obtain a fairness-aware classification.
- Applied the algorithm to evaluate the fairness performance of four datasets.

**Special Topics in Insurance: Reversionary Annuity for Spouse**

- Designed a joint-life insurance policy for spouses, including policy details and conditions.
- Calculated and compared insurance premiums based on the joint mortality rate for spouses using four Archimedean Copula functions.

**SKILLS**

**Language Skills:** Thai (Native Speaker), English (Fluent)

**Computer Skills:** Python, SQL (MongoDB), Google Cloud Platform (BigQuery), Power BI, Solidity (basic), Linux basic command (GIT, SSH), LATEX, Microsoft Office