

Teerapat (Ted) Chaiwachirasak

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<https://github.com/teerapat-ch>

- A graduate student in Applied Computing (ML) - looking for a position to apply cutting-edge machine learning techniques in a highly-efficient manner and gain expertise in specific fields.
- Three years of experience working on large-scale hotel recommendation systems on an online travel booking platform with millions of travel bookers and accommodation partners.
- Worked on hyper-parameter optimization, recommender systems, machine learning in a production environment, and natural language processing

EDUCATION

University of Toronto <i>Master of Science in Applied Computing (MScAC)</i> <ul style="list-style-type: none">• Vector AI Scholarship Recipient 2021	Expected December 2022 Toronto, ON
Sirindhorn International Institute of Technology (SIIT) <i>Computer Engineering - Intelligent System Track</i>	Aug 2021 - May 2018 Bangkok, TH
Metropolia University of Applied Science <i>Exchange Studies in Information Technology</i>	Jan 2018 - May 2018 Helsinki, FI

EXPERIENCE

ML Applied Research Intern <i>Crossing Minds</i>	May 2022 – Dec 2022
<ul style="list-style-type: none">• Implemented a transfer-learning approach for Bayesian Hyperparameter Optimization to speed up the process by utilizing knowledge from historical hyperparameter tuning runs (RGPE).• Formalized methods to extract dataset-level features which can uniquely characterize recommender datasets based on temporal-based information.	
Data Scientist <i>Agoda Co, Ltd.</i>	Mar 2020 – Aug 2021
<ul style="list-style-type: none">• Applied machine learning, deep learning, and statistical methods on user-generated data to improve the hotel ranking system and maximize the company's number of bookings, revenues, and lifetime values.• Improved the existing hotel recommendation system by constructing Hotel2Vec embeddings from user views behaviors using TensorFlow, resulting in a significant win on an A/B experiment with 0.74% bookings uplift.• Applied a LISTwise ExplaiNer (LISTEN) algorithm to learn insights from hotel ranking results obtained by the deep recurrent neural network model (Bi-LSTM), of which insights were used for the team's strategic decision.	
Machine Learning Engineer <i>Agoda Co, Ltd.</i>	Sep 2018 - Mar 2020
<ul style="list-style-type: none">• Implemented machine learning products from end-to-end, from preprocessing the training data using Spark, serving the trained models on production codebase written in Scala, and deploying the new features with in-house tools.• Analyzed terabytes of traffic data to identify the cause of timeout errors thought to be a latency issue, restoring the ranking service's success rate to 99%.• Set up the CI/CD process to automate docker deployment, integration test, and load test on TeamCity, tremendously shortening the deployment process which would have taken approximately 4 hours to do manually.	
Data Scientist Intern <i>Total Access Communication Public Company Limited (dtac)</i>	Jul 2017 - Aug 2017
<ul style="list-style-type: none">• Implemented the sentiment classifier on Thai social media listening platform using Bidirectional long short-term memory (Bi-LSTM) on Word2Vec embeddings - f1-score of 0.74, 20% higher than the N-gram baseline. [GitHub]• Coded a platform for the call-center team to label the social media comment's sentiment to solve the lack of labels.	

PROJECT/PUBLICATION

[Project] A Deeper Look into Dense Shortcut Nets (Image) [GitHub] [Report]	Apr 2022
[Project] Automatic Library of Congress Classification (NLP) [GitHub] [Report]	Dec 2021
[Publication] A Preliminary Study on Fundamental Thai NLP Tasks [Paper]	Aug 2018

TECHNICAL SKILLS

Languages: Python, Scala, JavaScript (React, Node, Express), SQL
Machine Learning: Linear/Logistic Regression, K-NN, Decision Trees, Support Vector Machine (SVM), Neural Networks, Random Forests, Ensembles method (Bagging, Boosting, Stacking), K-Means Clustering, PCA
Deep Learning: MLP, CNN, RNN (LSTM, GRU), Attention Mechanism, Transformers, Word2Vec, GloVe, BERT
Python Packages: TensorFlow, PyTorch, BoTorch, NumPy, pandas, Scikit-learn, NLTK, Matplotlib, Seaborn, Plotly
Others: Nvim, JetBrains, pyenv, virtualenv, poetry, git, GitHub, Vimium, Docker