



Sarunchana Yongchaiwathana

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EDUCATION

Master of Science in Informatics

Sep 2025 - Present

University of Zurich, Switzerland

- **Cumulative GPA:** 5.25/6.00
- **Major:** Artificial Intelligence, **Minor:** Banking & Finance
- **Master's Project:** Disentangling Human Behavior Using DisLRUs – evaluating the parameters updating algorithm between BPTT and RTRL

Bachelor of Engineering (Computer Engineering) - First Class Honours

Aug 2017 - May 2021

Sirindhorn International Institute of Technology, Thammasat University, Thailand

- **Cumulative GPA:** 3.93/4.00

WORK EXPERIENCE

Senior Data Scientist - Agoda Services Co., Ltd., Thailand

Apr 2022 - Aug 2025

Website: <https://www.agoda.com/about-agoda/>

Pricing Optimization team:

- **Dynamic Pricing & Optimization:** Redesigned pricing constraint logic using soft-cap rescaling to recover RL optimization signal in previously insensitive regions, and built a multiplicative throttling function to prevent overshooting when market conditions shift – improving stability and signal quality in global automated pricing systems.
- **Survival Analysis & Cost Forecasting:** Rebuilt a cashback redemption prediction model using hazard rate survival analysis – reducing training data lag by 120 days, eliminating systematic cost estimation errors caused by the static model's discontinuous predictions, and validating the business need upfront via claim rate decomposition before committing to the solution.
- **Signal Quality Analysis:** Diagnosed signal integrity in a live RL pricing system – decomposed treatment-to-signal correlation across three simultaneously running RL models and redesigned the winsorization threshold from a fixed value to a destination-aware formula, narrowing the spread of remaining signal value across markets by roughly half.

Experimentation team:

- **Statistical Inference:** Assessed experiment feasibility through pre-launch power analysis simulations; built interaction-testing frameworks to detect confounding between simultaneously running A/B tests; and applied FDR-corrected analysis to evaluate metric sensitivity and surface behaviorally distinct user segments across thousands of historical experiments.
- **Predictive Analytics & Machine Learning:** Developed a CatBoost classification framework to forecast the business outcome of A/B tests from early-stage signals – enabling earlier decisions and reducing recommendation flip rates compared to the rule-based baseline.
- **Experimentation Design:** Conducted pre-experiment feasibility analysis for a new pricing feature – compared different types of allocation strategies through Monte Carlo simulation across duration, adoption rate, and booking lift parameters; suggested a two-step winsorization approach to stabilise variance estimates for noisy ROI metric.

Website: www.sertiscorp.com

- **Supply Chain Optimization:** Improved a multi-objective steel cutting model to minimize a weighted combination of yield loss, production cost, and inventory cost – extended it to handle real-world edge cases, deployed on Google Cloud in collaboration with the client, and demonstrated the optimized schedule achieved lower total cost than manually engineered production plans.
- **Demand Forecasting:** Enhanced the promotion modeling component of an FMCG demand forecasting pipeline by generalizing it to handle promotions of varying duration, improving predictive accuracy across enterprise client deployments.

TECHNICAL SKILLS

- **Programming Languages:** Python, SQL, Scala, Java
- **Tools & Frameworks:** pandas, NumPy, Spark, LightGBM, TensorFlow, scikit-learn, Hadoop, Tableau
- **Project Themes:** Experimentation & A/B Testing, Predictive Modeling, Optimization

LANGUAGES

- **Thai:** Native
- **English:** Professional Proficiency
- **German:** A2 (taking language course at UZH Sprachenzentrum)

TRAININGS & INTERNSHIPS

Mathematics for ML and DS Specialization ([DeepLearning.AI, Coursera](#)) **Jun 2025 - Aug 2025**

- 3 courses: Linear Algebra, Calculus, and Probability & Statistics for Machine Learning & Data Science

Deep Learning Specialization ([DeepLearning.AI, Coursera](#)) **Apr 2021 - Jun 2021**

- 5 courses: Neural Networks and Deep Learning, Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization, Structuring Machine Learning Projects, Convolutional Neural Networks, and Sequence Models

Data Science Internship Bootcamp at KBTG ([kbtg.tech/](#)) **Jun 2020 - Jul 2020**

- Developed a credit card propensity-to-revolve model to identify customers with a high likelihood of revolving credit usage
- Created a clustering model to segment users based on their spending behaviors and identified themes for potential marketing campaigns
- Received the Best Business Analytics Award

GRANTS & AWARDS

Young Scientist and Technologist Programme Scholarship **Aug 2017 - May 2021**

Fully funded 4-year scholarship from the National Science and Technology Development Agency (NSTDA)

Global Korea Scholarship for ASEAN countries' Science and Engineering Students **Jul - Aug 2019**

Fully funded scholarship for ASEAN students to undergo training from Korea Government

SIIT Academic Excellence Award **Aug 2018**

An achievement of the highest academic rank (top 1%) from SIIT