Pupipat Singkhorn

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EDUCATION

Chulalongkorn University

2022 - Present

Bachelor of Engineering - Computer Engineering Major. GPA: 3.48

• Relevant Coursework: Introduction to Law, Thai Economy, and EU Integration, Deep Learning, Machine Learning, Causal Inference and Discovery, Optimization, Statistics, Signal Processing.

Triam Udom Suksa School

2019 - 2022

Science-Mathematics Major. GPA: 3.85

- Thailand Physics Olympiad (TPhO) 19th TPhO: Bronze Medal, 18th TPhO: Participated
- Triam Udom Photo Club (Staff and Member) Captured photos at various school events.

WORK EXPERIENCE

Data Scientist Intern - Kiatnakin Phatra Bank

June 2024 - July 2024

- Used Car Price Forecasting
 - Developed ensemble machine learning models to forecast used car prices, aiding strategic decisions for automotive loan approvals.
 - Collected and cleaned real-world business data, incorporating macro- and micro-economic factors.
 - Utilized time-series analysis and Bayesian optimization techniques to improve accuracy.
- Loss on Sale Forecasting for NPLs
 - Built predictive models to estimate losses on Non-Performing Loans (NPLs), improving the bank's credit risk management.
 - Applied techniques like coarse classing, binning, and memory optimization to improve performance.

Freelance

- Physics & Mathematics Tutor Provided tutoring for Physics Olympiad camp, university admissions.
- Photographer Portfolio: instagram.com/pupick.sk Photographed various events and private sessions.

EXTRACURRICULAR ACTIVITIES & ACHIEVEMENTS

Investment Portfolio Analytics Dashboard Web App

November 2024

- Developed an OCR/LLM-powered system to extract and organize investment data, integrating market data.
- Built and deployed a dashboard to calculate performance metrics e.g., ROI, Sharpe Ratio, Volatility, CVaR.

Stock Return Forecasting with Portfolio Optimization Project

April - May 2024

- Developed an alpha factor model to forecast stock returns using classical ML and LSTM networks.
- Designed and implemented quantitative trading strategies and leveraged historical data for backtesting.

Investment Experience

April 2024

- Managed a self-directed investment portfolio with a TWRR of 15.46%, MWRR of 34.34%, and ROI of 14.47%, achieving an AUM of B119,240.54 (as of February 28, 2025).
- Evaluated risk-adjusted performance, maintaining a Sharpe Ratio of 0.54 (rfr $\approx 4\%$, CBOE-10Y-TNX).
- Monitored portfolio risk, with an MDD of 11.95\%, VaR of 3.25\%, and CVaR of 4.64\%.

Aihack Thailand 2023 - AI Hackathon | Awarded 1st prize and best performance prize.

December 2023

• Created a machine learning model to forecast credit default risk.

Participation in Business Case Competitions

2023

- Hult Prize at Chulalonqkorn Developed a social enterprise idea aligned with the UN SDGs.
- Chulalongkorn Case Discovery x Ascend Money Formulated a strategy for a financial services application.

Certifications

• Financial Engineering and Risk Management Specialization - Columbia University

November 2024

• Machine Learning Specialization - DeepLearning.AI & Stanford University

August 2024

• Google Data Analytics Professional - Google

July 2023

MISCELLANEOUS

Technical Skills

Applications: Excel, Power BI, Tableau, Git, GitHub

Programming Languages: Python, SQL, C++, C, HTML, CSS, LaTeX, Markdown

Programming Libraries: PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, Plotly, Streamlit

Languages: Thai (Native), English

Interests: Business, Economics, Politics, Books, History, Philosophy