# Pupipat Singkhorn

**♦** 082-642-9767 • pupipat.sk@gmail.com • Bangkok, Thailand

In LinkedIn.com/pupipatsk • ♀ GitHub.com/pupipatsk • ♦ https://pupipatsk.github.io/

#### **EDUCATION**

## Chulalongkorn University

2022 - Present

Bachelor of Engineering - Computer Engineering Major.

Relevant Coursework: Pattern Recognition (Deep Learning), Algorithm & Data Structures, Database Systems

#### Triam Udom Suksa School

019 - 202

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.
  - Leveraged time-series analysis and Bayesian optimization techniques for enhanced 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

### Aihack Thailand 2023 - AI Hackathon

December 2023

- Created a machine learning model to forecast credit default risk.
- Performed data analysis, preprocessing, and feature engineering with linear and tree-based models.
- Awarded 1st prize and best performance (AUC) prize.

### 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, leveraging historical data for backtesting.
- Integrated portfolio optimization techniques to maximize returns while minimizing risks.

# Machine Learning for Fundraising Campaigns - SAS xCBS Hackathon Season 4 | 4th Place October 2024

• Created a targeted marketing model to improve donor outreach through a 2-stage ensemble model, achieving precise donor predictions and effective cost management.

## 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.

### 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 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

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

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

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

Languages: Thai (Native), English

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