

CV



Name: Mr. Phiphat Chomchit

Birth date: 27/02/1995

Location: Chiang Mai, Thailand

Contact Information

Email: takezocmu@gmail.com

Phone number: 0951851163

GitHub: <https://github.com/OrnlyP63>

Medium: <https://medium.com/@phiphatchomchit>

LinkedIn: <https://www.linkedin.com/in/phiphat-chomchit-517b81206/>

Profile

I have been coding in Python and **working with Artificial Intelligence/Machine Learning for five years**. I hold a **bachelor's degree in Mathematics** and a **master's degree in Data Science**. My expertise includes Statistics, Probability Theory, Linear Algebra, Calculus, Partial Differential Equations, and Ordinary Differential Equations, all integrated with Machine Learning applications. I have experience building Machine Learning projects using various frameworks and tools, including NumPy, SciPy, Pandas, Scikit-Learn, PyTorch, TensorFlow, FastAPI, GitHub, and Docker.

My projects primarily focus on improving model training time and reducing resource consumption. I believe that modern Machine Learning needs to be optimized for online streaming data, which demands high computational power and fast training. I have experience writing CUDA C to accelerate model training through parallel processing. Additionally, I research models that require fewer computational resources during the training process. I believe my skills can help you develop Machine Learning solutions that enhance your business.

Skills

- Programming Languages:
 - Python,

- Julia,
- C,
- CUDA C,
- NetLogo
- Frameworks & Libraries:
 - NumPy,
 - SciPy,
 - Pandas,
 - Scikit-Learn,
 - PyTorch,
 - TensorFlow,
 - Z3,
 - NetworkX,
 - JupyterLab,
 - FastAPI
- Tools & Technologies:
 - Docker,
 - Git,
 - Streamlit
 - Gradio
- Models & Techniques:
 - Extreme Learning Machine,
 - Reservoir Computing,
 - Reinforcement Learning,
 - Agent-Based Modeling,
 - Attention Mechanism,
 - Transformers,
 - Dendritic Gated Networks,
 - Hyperdimensional Computing,
 - Conformal Prediction,
 - Extreme Value Theory,
 - Portfolio Optimization,
 - Particle Swarm Optimization,
 - Genetic Algorithm,
 - Cryptography,
 - Quantum Computing,
 - Monte Carlo Simulation

Work Experience

- AI Engineer Consultant – Synapses Thailand | Remote Freelancer | Jan 2022 – Present
 - Cryptocurrency Portfolio Optimization – Developed optimization models for asset allocation, improving portfolio returns while reducing risk exposure.
 - Route Optimization – Designed AI-driven routing algorithms to minimize logistics costs and enhance operational efficiency.
 - Anomaly Detection using Machine Learning – Built anomaly detection systems for fraud prevention, improving security and reducing financial losses.

- Churn Rate Analysis on Customer Data – Performed data cleaning and visualization to identify high-risk customers, helping improve retention strategies.
- Predicting Default Debt Rate in Finance – Developed financial risk models to assess default probability, enabling businesses to manage risk more effectively.

Personal Projects

- My medium blog: I write many articles about Probability theory, Mathematics and AI
 - Using Extreme Value Theory to analyze the worst scenario in the Crypto Market [link](#)
 - Trading Strategy Assessment By The Bootstrap Method. [link](#)
 - Fermat Factorization Algorithm can break poor RSA encryption. [link](#)
 - Let's code Lattice-Based Encryption: The post-quantum encryption. [link](#)
 - Deep learning in the Matrix [link](#)
 - Extreme Learning Machine (ELM) is the speed-up learning method for Artificial Neural Network [link](#)
 - Let's deploy your deep learning model with Gradio. [link](#)
 - etc.
- Academic Papers
 - A Product of Two Primes with Difference 2 [link](#)
- Conferences
 - Strong-motion Earthquake Prediction Model using Convolutional Extreme Learning Machine [link](#)
 - Auto Encoder for Anomaly Detection in the Cryptocurrency Market Using On-Chain Data [link](#)
- GitHub Project
 - Complexity Science Project [link](#)
 - Quantum Tutorial [link](#)
 - Implement ML using FastAPI [link](#)
 - Basic PyTorch Tutorial [link](#)
 - TensorFlow tutorial [link](#)
 - Air Pollution Prediction using GNN [link](#)
 - Genetic Algorithm for Mathematics [link](#)
 - Z3 optimization [link](#)
 - Topic Clustering with LDA [link](#)
 - Bird Song Detection using Deep Neural Network [link](#)
 - Time Table Management using GA [link](#)

Education

- Bachelor's Degree in Mathematics, Faculty of Science, Chiang Mai University (2014–2018)
- Master's Degree in Data Science, Department of Engineering, Chiang Mai University (2021–Present)

Certifications

- Super AI Engineer Season 2

- Automated Reasoning: satisfiability [link](#)
 - Neural Networks and Deep Learning [link](#)
 - Biology Meets Programming: Bioinformatics for Beginners [link](#)
 - Introduction to Agent-Based Modeling [link](#)
 - Nonlinear Dynamics: Mathematical and Computational Approaches [link](#)
 - Introduction to Dynamical Systems and Chaos [link](#)
 - Fractals and Scaling [link](#)



