Jaime Hieu Do

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ML PhD and Research Scientist at Preferred.AI (SMU) working on behavioral understanding and personalization for portfolio management. Proven track record of architecting, developing, and deploying state-of-the-art sequential models within high-impact open-source frameworks (Cornac).

Work Experience

Singapore Management University - Preferred.AI | Research Scientist | November 2025 – Present | Singapore
- Built investor-understanding systems for a research collaboration with a global wealth-management bank, aimed at converting self-directed clients into managed and advisory mandates.
- Engineered portfolio-behavior features grounded in Modern and Post-Modern Portfolio Theory (capturing disposition effect, procyclical market timing, negative-yield churning, and barbell/complexity-skewed allocations); integrated SHAP-based explainability models for investor outcomes attribution.
- Prototyped agentic-AI and RAG investor-profiling tools (LangGraph, Ollama, LangChain/LCEL).

OSP Group JSC | AI Engineer Intern | May 2019 – April 2020 | Hanoi, Vietnam
- Engineered predictive pipelines (**linear regression, ARIMA, XGBoost**) for customer lifetime value.
- Built a **Vietnamese news recommender system** powered by a **language model trained from scratch**.

Education

SMU School of Computing and Information Systems — Singapore
PhD in Computer Science — *August 2020 – August 2025*
Dissertation: Modeling Multiple Tasks in Recommendation Systems

VNU University of Engineering and Technology — Hanoi, Vietnam
BSc in Computer Science (Summa Cum Laude; Excellent Thesis Award) — *August 2016 – July 2020*
Thesis: Vietnamese News Recommendation Using Language Model

Publications

Compositions of Variant Experts for Integrating Short-Term and Long-Term Preferences
Jaime Hieu Do, Trung-Hoang Le, and Hady W. Lauw
ACM Transactions on Recommender Systems (TORS), Volume 4, Issue 3, 2026

Dual-Target Disjointed Cross-Domain Recommendation Mediated via Latent User Preferences
Jaime Hieu Do and Hady W. Lauw
ACM SIGKDD Explorations Newsletter, Volume 27, Issue 1, June 2025

Continual Collaborative Filtering Through Gradient Alignment
Jaime Hieu Do and Hady W. Lauw
Proceedings of the 17th ACM Conference on Recommender Systems (RecSys'23), September 2023

Projects

Cornac | *GitHub ~1,000 stars* | Core Contributor | **Endorsed by ACM RecSys 2023 for Reproducibility**
- Developed and optimized **PyTorch backend** for classical recommendation models (MF, FM, NCF), achieving competitive performance with Cython/C++ implementations, enhancing usability for advanced customization.
- Designed and implemented an **end-to-end pipeline** for **sequential recommendation**, encompassing data processing, model training, and evaluation with Transformer-based baselines, including BERT4Rec and GPT4Rec.

Awards & Achievements

PhD Full Scholarship from Ministry of Education, Singapore, 2020 – 2025

Excellent Thesis Award VNU University of Engineering and Technology, 2020

Full Scholarship for top 5% excellent students, University of Engineering and Technology, 2016 – 2020

Academic Services & Skills

Reviewer: TORS, KDD

Programming: Python, PyTorch, LangGraph, LangChain, Ollama

Skills: Machine Learning, Recommender Systems, Deep Learning, Transformers, Agentic AI, RAG