Khoa Tran

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OVERVIEW

PhD student in Computer Science at Sungkyunkwan University, focusing on AI security, AI privacy, and probabilistic models. Passionate about designing theoretical frameworks for secure and privacy-preserving AI with real-world applicability.

EDUCATION

Sungkyunkwan University **Sep 2024 – now**
PhD student in Computer Science *South Korea*
- Research interest: AI Security, AI Privacy, Machine Unlearning

University of Engineering and Technology - Vietnam National University **Aug 2018 – Jan 2023**
Bachelor of Science in Robotics Engineering *Vietnam*
- Thesis: Mixture Gaussian Bayesian neural network for abnormal musculoskeletal classification

RESEARCH EXPERIENCE

DASH Lab, Sungkyunkwan University **Sep 2024 – now**
Research Assistant *South Korea*
- Research on theoretical machine unlearning, improving efficacy and efficiency.
- Research on physical inconsistencies and violations in AI-generated images and videos.
- Research on AI model compression in edge deployment.

Robotics-AI Lab, UET-VNU **Mar 2022 – Aug 2024**
Research Assistant *Vietnam*
- Applied AI models for uncertainty estimation in medical applications.

UET-AI Lab, UET-VNU **Sep 2019 – Mar 2022**
Research Assistant *Vietnam*
- Applied AI models to enhance low-quality images.

AI Vietnam Online Lab **Feb 2020 – Dec 2020**
Research Assistant *Vietnam*
- Applied AI models to colorize grayscale and historical images.
- Developed a pretrained model for stereo imaging and depth estimation.

INDUSTRIAL EXPERIENCE

EASTGATE Software **Aug 2020 – Aug 2024**
AI Engineer *Hanoi, Vietnam*
- Integrated LLM into production applications to address domain-specific challenges.
- Conducted research, development, and optimization of AI models across CV and NLP tasks, including object detection, OCR, NER, and information extraction.
- Designed and optimized image processing algorithms to enhance OCR system performance and accuracy.
- Leveraged and integrated cloud services (Azure, AWS) into scalable AI solutions.
- Supervised and mentored intern teams during project development and training.

AIGO - We make AI works **Jan 2020 – Mar 2020**
AI Engineer Intern *Hanoi, Vietnam*

- Researched and developed CNN models for image classification and OCR tasks.
- Deployed interactive AI-powered web applications, enabling user engagement and accessibility.

SERVICE

- **Reviewer**, ICML, KDD **2026**
- **Reviewer**, NeurIPS, ACM ASIACCS **2025**
- **Technical Committee**, ACM ASIA Conference on Computer and Communications Security (ACM ASIACCS) **2025**

OUTREACH

Volunteer
International World Wide Web Conference 2025 (WWW2025) *Australia,* ***2025***

- Technical support for a conference refers to the assistance provided with audiovisual setup.

TECHNICAL SKILLS

Methods: Deep learning model development, optimization method, quantitative & qualitative analysis

Tools: Python, C/C++, Java, C#, R, Pytorch, Kafka, MongoDB, Milvus, Docker, AWS Services, Azure Services

REFERENCES

- Prof. Simon S. Woo (Sungkyunkwan University) swoo@g.skku.edu
- Prof. Hoang Van Xiem (University of Engineering and Technology - VNU) xiemhoang@vnu.edu.vn

SELECTED PUBLICATIONS

1. Khoa Tran and Simon S. Woo. "Efficient Unlearning through Maximizing Relearning Convergence Delay." **CVPR Findings**, 2026
2. Khoa Tran and Simon S. Woo. "Fairness and Robustness in Machine Unlearning." **WWW**, 2025
3. HoangVan, Xiem and Khoa Tran Van. "Gaussian mixture model and Bayesian convolutional neural network for abnormal musculoskeletal radiographs classification." **Evolutionary Intelligence**, 2024