# Tra My (Chiffon) Nguyen

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#### **RESEARCH INTERESTS**

Knowledge Extraction from Diverse Data, especially human-generated multimedia data and multimodal data Continual Learning and Knowledge Editing in Language Models (LMs): understanding how LMs store and utilize knowledge; retrieval augmentation and updating parametric knowledge

Language as instruction: question answering, language agents, code generation

#### **EDUCATION**

**Minerva University** 

San Francisco, CA, USA

Bachelor of Science, Computational Science (GPA: 3.84 / 4.00)

09/2021 - Expected 05/2025

**Relevant courses**: Machine Learning, Statistical Modeling, Causal Inference, Software Engineering (React+Flask) **Self-Study:** deeplearning.ai's <u>Machine Learning Specialization</u>, <u>Natural Language Processing Specialization</u>,

CMU's Advanced NLP

#### **RESEARCH EXPERIENCE**

Landshut University of Applied Sciences x BMW Group

Landshut, Germany 04/2024 - Present

Research Intern (AI & Mixed Reality Lab)

Topic: Point cloud registration (different sensors) and 3D scene graph

Advisors: <u>Professor Eduard Kromer</u> and <u>Professor Sandra Eisenreich</u>

T-Hub Hyderabad, India Student Researcher (Human Resources Department) 01/2023 - 04/2023

Topic: Mental health at workplace, qualitative + quantitative research

Supervisor: Suvidha Jani

#### **TEACHING**

Minerva University

Remote

#### **Teaching Assistant, Introduction to Computer Science & Statistics**

01/2022 - 04/2023

- Graded 80 weekly quizzes, provided personalized feedback, and hosted office hours for 200+ freshmen
- Assisted reviewing assignments, leading to a 20% improvement in students' academic performance
- Collaborated with faculty to refine course materials, increasing student engagement by 25%

#### **PROJECTS**

# Capstone/Thesis: Can Small Language Models Speak Coherent Vietnamese?

05/2024 - Present

Advisor: Professor Patrick Watson

- Constructing a quality dataset of Vietnamese stories (3GB), combining translated content from TinyStories with crawled human-generated content
- Training a 100M-parameter Vietnamese Small Language Model, and fine-tuning on this dataset

#### **Q&A with My Second Brain** (Python, LlamaIndex, HuggingFace)

10/2023 - 02/2024

 Implemented a retrieval augmented generation system to interact with personal knowledge base of PDFs and Markdown files, resulting in 50% more contextual and accurate answers, using LlamaIndex, sentence-transformer, and HuggingFace's Mistral and OpenAl API

## **SKILLS**

Languages: Python, SQL, R, Javascript

Tools: Git, Docker, Excel/Google Sheets, Jupyter Notebook

Libraries: PyTorch, Hugging Face, scikit-learn, NumPy, Pandas, Matplotlib, PyMC, Scipy, LlamaIndex, LangChain

Frameworks: Flask, React, Jax/Flax

## **SERVICE & LEADERSHIP**

- Vietcode (2019-2021): Led a team of 60 to organize tech webinars and robotics classes for 500+ students
- SheCodes Vietnam (2018-2020): Coordinated the first all-female Vietnamese hackathon for 200 participants

#### **REFERENCES**

Patrick Watson, Professor, Minerva University, pwatson@minerva.edu

Eduard Kromer, Professor, Landshut University of Applied Sciences, Eduard.Kromer@haw-landshut.de