# My (Chiffon) Nguyen

San Francisco, CA, USA | chiffonng136@gmail.com | github.com/mychiffonn | mychiffonn.com

# RESEARCH INTERESTS

NLP and HCI for human-compatible accessible, trustworthy, and cooperative AI. My interests span 1) multilingual and cross-cultural adaptation, 2) human-AI alignment focusing on data curation, pluralistic alignment, scalable oversight, benchmarking and holistic evaluation, and 3) cooperative AI and social intelligence. Outside technical research, I am interested in AI policy and AI for education.

#### **EDUCATION**

#### Minerva University, College of Computational Sciences

Sep 2021 — May 2025

B.S in Computational Sciences (Machine Learning and Statistics), GPA: 3.7/4.0

San Francisco, CA, USA

- Relevant Coursework: Machine Learning (A), AI Ethics, Bayesian Modeling (A), Statistical Modeling and Causal Inference (A), Optimization Methods (A), Probability and Statistics (A-), Software Engineering
- Certifications: Natural Language Specialization (deeplearning.ai, 2024), Machine Learning Specialization (2022)
- Self-study: ARENA AI Safety (2025 ongoing), AI Alignment (Bluedot Impact, 2025)

# RESEARCH EXPERIENCE

AI Research Fellow Algoverse AI Research Sep 2025 — Present

Remote

• Working on AI alignment research project under a research mentor

#### Machine Learning Research Assistant

Jun 2024 — Aug 2024

AI & Mixed Reality Lab, Landshut University of Applied Sciences

Landshut, Bavaria, Germany

- Implemented **3D object detection pipeline** using LiDAR point clouds and PointPillars algorithm in PyTorch and NVIDIA TAO Toolkit for autonomous navigation research
- Conducted comparative analysis of model performance across standard vs. synthetic datasets

#### Causal Inference Research Intern (Replication and Extension)

Nov 2023 — Dec 2023

Minerva University (Advisor: Professor Alexis Diamond)

Remote

- Replicated and extended <u>Chrisinger (2021)</u>'s causal inference of Philadelphia's beverage excise tax effects on SNAP benefit redemption using synthetic control in R, analyzing policy impacts across 4+ counties and 50+ months of longitudinal data
- Identified critical limitations in dataset reliability and magnitude discrepancies between original and replicated results
- Conducted new leave-one-out robustness analysis on synthetic control models, demonstrating model instability for Philadelphia County, providing methodological insights absent from original study

## TEACHING EXPERIENCE

## Minerva University

Lead Tutor, PR51 Programming with Python

Spring 2025

- Taught weekly labs for 40+ first-year students of diverse learning backgrounds, covering computer systems, Python fundamentals, object-oriented programming, debugging, security, and data structures
- Extracted 20 data-driven pedagogical insights using Google Drive API, Google Sheet trackers, student and tutor surveys, improving hands-on learning and student engagement for the next class iteration

Lead Teaching Assistant, FA50/FA51 Critical, Statistical and Algorithmic Thinking

Fall 2023 - Spring 2024

• Guided 150+ students annually in formal logic, probability and statistics, algorithmic thinking, and simulation, through office hours, personalized feedback on 25 quizzes; assisted professors in grading 6 assignments annually.

#### COMMUNITY ENGAGEMENT & SERVICES

- Aug 2025 Present: Communication and Design Engineer at <u>SEACrowd</u> (AI research for Southeast Asia), building website and managing crowdsourced data annotation for underrepresented languages
- Feb 2025: Dataset contributor for Humanity's Last Exam benchmark dataset and SEA-VL

## SELECTED PROJECTS

# Conscious AI Usage Tips (github.com/mychiffonn/conscious-ai-tips)

Sep 2025 — Oct 2025

Full-stack website compiling tips for conscious and environmentally aware usage and development of AI models, with advanced filtering and sorting. Developed with HTML, PicoCSS, JavaScript, and PostgreSQL. Deployed on Render.

Astro Academic Portfolio Theme for Researchers (github.com/mychiffonn/website) Aug 2025 — Present High-performance academic theme, enabling fast, accessible, and multilingual publishing of publications and technical blogs while ensuring top-tier SEO (80+) and Lighthouse (100) scores using Astro, TailwindCSS and shaden/ui

Mnemonic Generation for Vocabulary Learning (github.com/mychiffonn/mnemonic-gen) Oct 2024 — Mar 2025

- Designed an AI chatbot that generated mnemonic devices for learning and memorizing vocabulary, **synthesizing 50+ papers** across linguistics, psycholinguistics, language education, and large language models
- Applied chain-of-thought distillation pipeline: generated 10k synthetic reasoning examples from teacher model DeepSeekR1, fine-tuned student model Gemma3-1b using LoRA via trl and unsloth libraries
- Implemented **Direct Preference Optimization** on 500 annotated preference pairs, achieving statistically significant improvements in alignment with learner judgments on cognitive science principles such as memorability and imageability

## SeizureSavvy (github.com/mychiffonn/SeisureSavvy)

Feb 2024 — Apr 2024

- Managed a team of 4 to build a Progressive Web App for intuitive seizure management with machine learning-based predictive alerts in Flask (Python), React, and Chakra UI
- Enhanced data logging and medication tracking, increasing user data accuracy by 35%
- Conducted code reviews in Python and React JavaScript, cutting 40% critical bugs and enhancing application stability

## TECHNICAL SKILLS

- Programming Languages: Python, TypeScript, R, SQL, Bash
- Machine Learning & Statistics: PyTorch, HuggingFace, unsloth, scikit-learn, LlamaIndex, SciPy, PyMC
- Web: React, Astro, Express, FastAPI, PostgreSQL, Flask, Jekyll, Tailwind CSS, shadcn/ui
- Tools & Technologies: Git, Docker, Render, Railway, Netlify, LaTeX, Zotero, Typst

# **MENTEES**

• Hien T. Mai (Minerva University) - Sep 2025 - present