Wenjun Dong

773-516-7074 | wenjundong2026@u.northwestern.edu | linkedin.com/in/wenjun-dong

EDUCATION

Northwestern University   Expected Dec. 2026
Master of Science in Artificial Intelligence   *Evanston, IL*

New York University   May. 2025
Bachelor of Science in Data Science | Major GPA: 3.86/4.00   *New York, NY & Shanghai, China*

SKILLS

Programming: Python, C, JavaScript, R, SQL, Bash/Shell, LaTeX, HTML, CSS, React, Node.js
Data & ML: NumPy, pandas, scikit-learn, XGBoost, PyTorch, OpenCV, librosa
LLM & APIs: Hugging Face Transformers/accelerate; OpenAI & Qwen APIs (inference/integration)
Backend & MLOps: Flask, FastAPI, Docker, Git, Linux

PROFESSIONAL EXPERIENCE

X-Sigma Partners | Machine Learning Intern   *Shanghai, China | May. 2025 - August. 2025*
- Developed data automation systems with Python and SQL to streamline large-scale data collection and processing, improving efficiency by **70%+** and supporting downstream analytics
- Designed, built and deployed a content-analysis platform that combines web-scraping with NLP to extract social-media trends, generate social-media contents based on analysis, and launched it on Alibaba Cloud for scalable, production-ready use

New York University | Research Assistant: Cognitive Model in LLM   *Shanghai, China* | June. 2024 - Dec.2024
Advisor: Professor Hongyi Wen, *Assistant Professor*
- Engineered a World Values Survey pipeline using embeddings + K-Means, boosting cultural-cognitive segmentation (**silhouette score ↑ 200%** with Sentence Transformers vs. baseline)
- Applied Prompt Optimization (ProTeGi) with gradient-based updates and chain-of-thought feedback, reducing prediction error on value-judgment tasks (**MSE ↓ ~6%**) and enhancing contextual alignment
- Fine-tuned LLaMA-3 with LoRA, enabling efficient adaptation to cognitive decision-making tasks while cutting compute cost vs. full fine-tuning (**>90% parameter reduction**) and validating performance across clusters

NYU Flexible AI-enabled Mechatronic Systems Lab (FAMS) | Research Assistant   June. 2024 - August.2024
Advisor: Professor Rui Li, *Industry Assistant Professor*   *New York, NY*
- Fine-tuned YOLOv5/YOLOv10 for endoscopic tumor detection, achieving **97.3% precision** on a held-out video set; expanded the training corpus by annotating 1,000+ frames
- Ran head-to-head evaluations (accuracy–latency–memory) of YOLOv5 vs. YOLOv10 to optimize model selection for real-time medical use cases

China International Capital Corporation | Quantitative Strategies Intern   Mar. 2024 - June. 2024
                                                                                                  Shanghai, China
- Developed and tuned **XGBoost models** with time-series validation, achieving consistent **≥50% directional accuracy** and improved generalization across multiple periods
- Benchmarked traditional ML vs. **deep tabular models** (TabNet, NODE, DNF), with XGBoost showing superior robustness (**correlation ≈0.86**) across pipelines

PROJECT EXPERIENCE

Airline Systems Building (Database), NYU Shanghai   Aug. 2024 - Dec.2024
- Developed a flight booking website that displays user statistics through data visualization elements
- Utilized MySQL for database management and hashed using Bcrypt to ensure data security
- Implemented backend functionality, using Flask to handle session management, user authentication, and ticket purchases