XINXING WU, PH.D.

Applied Scientist | AI Data Scientist | Machine Learning Engineer (Authorized to work in USA)
GitHub — https://github.com/xinxingwu-uk **HomePage** — https://xinxingwu.github.io
Phone: 617-259-6772 **Lexington, KY** (Open to relocate) **E-mail**: xinxingwu@gmail.com

Developed and open-sourced ML algorithms (NeurIPS/AAAI/IJCAI) adopted in multiple applied analytics pipelines; Expert in feature selection, deep learning, GNNs, survival analysis, algorithmic stability, LLM finetune. Building reproducible Python pipelines and dashboards end-to-end that drive decisions in business. Strong in problem scoping, modeling, evaluation, and clear stakeholder communication.

TECHNICAL SKILLS

- **ML & Stats**: feature selection, deep learning, GNNs, survival analysis, algorithmic stability, anomaly detection, experiment design, model evaluation, LLM Finetuning, etc.
- **Data & Visualization**: Pandas, NumPy, Matplotlib, Seaborn; dashboards (Plotly/Streamlit), SQL.
- **Libraries**: TensorFlow/Keras/PyTorch, Scikit-learn, Transformers, SciPy, Scrapy, Gradio, etc.
- **Programming**: Python, R, Java, C#; React/React native; PHP, JavaScript, etc.
- **Workflow**: GitHub, JupyterLab/PyCharm, Power BI/Tableau, Linux, GPU training (TACC; Colab)
- **Certifications**: Red Hat Certified Engineer (RHCE); Red Hat Certified System Administrator (RHCEA)

SELECTED PROJECTS - OPEN SOURCE

- **FAE** - Fractal Autoencoders for Feature Selection (AAAI'21)· Tensorflow+Keras: Repo
- **UFS** - Stability & Generalization for Unsupervised Feature Selection (NeurIPS'21). Repo
- **DGAE** - Deep Graph Neural Network for Link Prediction (IJCAI'22). Repo
- **AD_Survival** - DeepSurv pipeline for clinical survival analysis. scikit-learn: Repo
- **SSVA** - Singing Syllabi with virtual avatars (2025). LLMs: Repo **JS Projects** - Repo

EXPERIENCE

External Experts Program at Amazon MTurk (Part-time), 2025 - Present
Designed challenging math/analysis tasks to probe LLM reasoning; created rubrics and analyzed failure modes; suggested model improvements.

Assistant Professor at Midway University, Kentucky, United States, 2023 - 2025
Conducted applied research translating to open-source repositories and classroom adoption, such as Singing Syllabi with virtual avatars. Designed and delivered practice-oriented ML projects.

Principal Investigator at Shanghai Threebio Technology Co., Ltd. (Part-time), Shanghai, China, 2016 - 2018
Build demand-forecasting and statistical computing pipelines from historical purchase data; delivered actionable insights to product.

Senior Algorithm Engineer at Shanghai Advanced Research Institute of CAS, Shanghai, China, 2012 - 2013
Implemented high-throughput algorithms on many-core (Tilera); optimized data-parallel performance in Python/C-adjacent environments

Algorithm Developer at Shanghai Alcatel Network Support Systems Co., Ltd., Shanghai, China, 2011 - 2012
Developed analytics features using Java/SQL; collaborated with platform engineers to integrate algorithms into production services

EDUCATION

- Postdoctoral Scholar, ML & Data Analysis - University of Kentucky, United States, 2019 - 2022
- Visiting Researcher, ML - Boston University, United States, 2018 - 2019
- Ph.D., Computer Applications Technology - East China Normal University, China, 2007 - 2011