Yunwei (Jade) Cao

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EDUCATION

University of North Carolina at Chapel Hill

Master of Science, Major in Information Science

Chapel Hill, NC, USA

2022.1-2023.12

Beijing Language and Culture University

Bachelor of Economics, Major in Finance

• Awarded top 10% merit scholarship for three consecutive years

Beijing, China

2017.9-2021.6

SKILLS

• Tech Tools: Python, HTML, SQL | R, MATLAB, Stata | Git, VS Code, Docker, AWS, Tableau, ChatGPT

- Applied Knowledge: Large Language Model, Math & Algorithms, Statistical Modeling, Network, Database
- Strength: Rapid tech adoption, Patience, Collaboration, Organizing, Cultural fluency, Problem-solving skills

EXPERIENCE

Lee County High School

Sanford, NC

Teacher, Computer and Information Tech, CTE Department

2024.8-Present

- Teach introductory computing and IT courses using a mix of lectures, hands-on labs, and project-based learning.
- Engage with 90+ students across diverse backgrounds; adapt instruction to support varying learning styles and encourage growth mindsets.
- Integrate **AI-in-education trends** into teaching practice; experiment with emerging tools and research-backed strategies to keep lessons relevant and future-focused.

School of Information and Library Science, UNC-CH

Research Assistant, Data Mining Lab

Chapel Hill, NC

2024.3-2024.7

• Built methods to detect and explain unintuitive patterns in machine learning models to improve transparency. (**Explainable AI**, Causal Inference, Influence Functions)

NCGrowth Chapel Hill, NC

Analyst, AICER Project

2023.10-2023.12

- Cleaned and merged **20,000+ vendor records** to identify qualified small businesses for large institutional buyers. (Excel, Python)
- Worked with cross-functional teams to **drive timely deliverables** and support regional economic development.

Ally Financial Inc.

Tech Scholars, Ally Tech Labs, Link

Charlotte, NC 2023.2-2023.5

- Designed **dashboards** and machine learning models to analyze and classify **consumer response data**, improving issue tracking and automation. (Pandas, Matplotlib, Scikit-learn) (demo)
- Developed a **web app** prototype using traditional NLP techniques to summarize blog content and enhance user experience. (Flask, NLTK)

CITIC Securities China

Assistant Finance Manager, Wealth Management Center

2020.3-2020.5

- Conducted **risk analysis** on listed stocks to guide product positioning aligned with client risk profiles. (VaR)
- Visualized private placement yields and organized roadshow insights to support data-driven investment advice.

PROJECTS

Machine Learning Specialization, Link

2022.8-2023.8, Chapel Hill, NC, USA

- Helped EPA scientists review air pollution research more efficiently by developing a solution to rank large-scale relevant references for policymaking. (Ensemble Models)
- Optimized supervised learning performance by resolving inconsistent labels from non-expert annotators. (Expectation-Maximization Algorithm)
- Analyzed movie and shopping reviews to detect sentiment, comparing classic models to improve prediction quality. (LLMs, Naïve Bayes, Logistic Regression, Decision Trees)

Data Analysis Specialization

2019.9-2020.9, Beijing, China

• Led a 4-member team in a national competition to study how user engagement affects app competitiveness; completed full research cycle from survey design to modeling and won "Best Research Award" with \$1,000 grant. (SPSS)