# ASPEN Y. WANG

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## RESEARCH OBJECTIVES

My passion in exploring human-centered application of language technologies has driven me to pursue graduate studies in Natural Language Processing and LLM. I am interested in research including but not limited to decision-making, knowledge reasoning, machine translation, and speech reasoning.

## EDUCATION

**Vassar College** — Aug. 2022 – May 2026

*B.A. in Computer Science, minors in Statistics and History* — *Poughkeepsie, NY*

– Relevant Coursework: Analysis of Algorithms, Data Structures and Algorithms, Computer Organization, Theory of Computation, Linear Algebra, Calculus 3
– Planned Coursework: Computational Linguistics, Data and its discontents, Bayesian Statistics, Statistical Machine Learning

## RESEARCH EXPERIENCE

**Summer Research Intern** — May 2024 – Aug 2024

*Depositar Lab, Institute of Information Science, Academia Sinica* — *Taipei, Taiwan*

– Advisor: Tyng-Ruey Chuang
– Area of Work: Data Analysis, Digital Preservation, Database Management, Research Data Management

- Designed an reusable ETL pipeline for migrating digital archive database, adhering to FAIR data principles, and documented the process as a comprehensive guideline for future use.
- Conducted literature review on research data management plans, persistent identifier protocols, and open data policies, and summarize findings into a detailed analysis report.
- Upgraded and maintained an outdated JavaScript web app, improving functionality and performance, and prepared it for publication as an npm package to support research tool dissemination.

## PROFESSIONAL EXPERIENCE

**Digital Systems Intern** — Sep 2024 – May 2025

*Vassar College Library* — *Poughkeepsie, NY*

- Worked on automating metadata ingestion and digital media uploads for library archives, applying metadata standards to improve data quality and reproducibility.

**Summer IT Volunteer** — Jun 2023 – Jul 2023

*Spring Sprouts Innovation for Social Services* — *Taipei, Taiwan*

- Contributed to the development and maintenance of the NPO's website infrastructure and conducted data-driven analysis to inform marketing strategies for fundraising initiatives.

## EXTRACURRICULAR ACTIVITIES

**Graphic Designer** — Sep 2022 – May 2024

*Portrait Magazine* — *Poughkeepsie, NY*

- Led design discussions on article layout and visual presentation for Vassar's semesterly Asian American Student Magazine, integrating principles of graphic design and audience engagement.

## RELATED PROJECTS

**Online Forum Political Leaning Detection Web Application** — Apr 2025 - Present

- Designed and developed a full-stack web application that applies natural language processing techniques to analyze political leaning in posts from online forums.
- Integrated sentiment analysis and keyword-based heuristics to generate real-time ideological "temperature" scores from user-submitted content.

## SKILLS

**Natural Languages**: Chinese(Mandarin):Native, English:Full Proficiency, French, Hokkien: Conversational
**Programming Languages**: Python, JavaScript, Java, SQL