Andrea Hui Wynn

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Education

M.S.E. in Computer Science, Princeton University — August 2022 – Present
Advisor: Dr. Adji Bousso Dieng
Relevant Coursework: Advanced Graph Theory, Large Language Models

Bachelor of Science, Rose-Hulman Institute of Technology — August 2018 – May 2022
Majors: Computer Science & Mathematics Double Major
Minors: Data Science & Psychology
GPA: 3.96
Relevant Coursework: Artificial Intelligence, Machine Learning, Deep Learning, Data Mining, Linear Algebra, Deterministic Models in Operations Research, Advanced Database Systems, Real Analysis, Data Structures & Algorithm Analysis

Employment

Software Development Engineer Intern — June – August 2022
Amazon Web Services, Seattle, WA
Team: Pool Balancing & Demand Forecasting Research. Designed and implemented tool for evaluating and monitoring metrics related to forecasting model accuracy.

Research Intern — November 2021 – May 2022
Circa, New York, NY
Conducted extensive literature review on supply chain modeling and optimization; designed supply chain management and optimization system for creating a circular economy.

Software Development Engineer Intern — June – August 2021
Amazon Web Services, Seattle, WA
Designed and developed novel health score metric for issue prioritization and server health overview, using anomaly detection applied to AWS CloudWatch metrics.

Software Engineering Intern — March – May 2021
Impact Snacks, Remote
Used web scraping and clustering algorithm to extract color palettes from websites given a URL.

Software Engineering Intern — June – August 2020
Kratos Defense Security Solutions, Colorado Springs, CO
Demonstrated feasibility of phase noise generation and usability in real time satellite communications testing through prototype implementation.

Software Engineering Intern June – August 2019
Collins Aerospace, Cedar Rapids, IA
Team: Government Systems Research & Development. Developed software guidance cue display to assist with formation flight for military rotary wing aircraft.

Publications & Preprints

A. H. Wynn. *Spectral Touching Points in Two-Dimensional Materials.* SIAM Undergraduate Research Online (SIURO), 2022. Link: https://doi.org/10.1137/21S143889X. Awarded Henry Turner Eddy Award for Applied Mathematics.

Talks & Panels

Rose-Hulman Undergraduate Mathematics Conference (externally reviewed).

23^{rd} Annual Nebraska Conference for Undergraduate Women in Mathematics (link). Presentation recording available here, starting at 16:00.

Honors & Awards

Princeton University Teaching Assistantship (Full Funding)	August 2022 - Present
Herman A. Moench Outstanding Senior Commendation (article)	May 2022
Frank Young Outstanding Service Award	May 2022
Rose-Hulman Center for Diversity Student Ambassador Award	May 2022
Rose-Hulman Independent Research Grant Recipient	February 2022
Society of Women Engineers Conference Scholarship (BorgWarner)	October 2021
2021 Chevron Scholarship Recipient	September 2021
Henry Turner Eddy Award for Applied Mathematics	May 2021
TechPointX SOS Challenge First Place Winner	August 2020
Rose-Hulman Student Leader of the Quarter	May 2020
Diversity Connect Engineering Design Challenge First Place Winner	October 2018
Rose-Hulman Dean's List, 12x (all quarters attending)	2018 - 2022

Professional Service & Leadership

Backpat Tutoring

www.backpattutoring.org

Founder & Volunteer Coordination Manager May 2020 – Present
An organization whose mission is to create a community of passionate volunteers across the US to provide free tutoring and educational resources to students in need.

Society of Asian Scientists and Engineers (SASE)

https://saseconnect.org/

Midwest Regional Coordinator June 2022 – Present
Serving as a mentor and connection to the SASE national organization for 3 Midwest SASE chapters.

Midwest Regional Conference Chair August 2021 – March 2022
Organized professional conference and career fair for 15 SASE Midwest chapters with 100+ attendees, 2 keynote speakers, and over 13 company sponsors.

President, Rose-Hulman Chapter February 2020 – May 2022
Launched community service program, planned events to represent more than 10 additional Asian countries, increased company speaker sessions and professional development events 2x.

Secretary, Rose-Hulman Chapter March 2019 – February 2020

Outreach Chair, Rose-Hulman Chapter October 2018 – March 2019

Society of Women Engineers

Secretary, Rose-Hulman Chapter March 2019 – March 2021

Teaching

Teaching Assistant, Princeton University
Computer Science: An Interdisciplinary Approach Fall 2022

Teaching Assistant, Rose-Hulman Institute of Technology
Introduction to Database Systems Spring 2021
Introduction to Database Systems Winter 2020-21
Programming Language Concepts Fall 2020
Introduction to Database Systems Spring 2020
Introduction to Database Systems Winter 2019-20
Introduction to Database Systems Fall 2019
Data Structures & Algorithm Analysis Spring 2019

English Tutor, Ringle February - June 2021
Coached professionals around the globe in advanced English speaking and writing. Specialized in helping students prepare for interviews and correcting academic papers. Awarded Tutor of the Week out of 400+ tutors on the platform during 2^{nd} week of tutoring.

High School Tutor, AskRose Homework Help September 2018 - May 2019
Helped answer questions in STEM subjects for high school students around the nation.

Lead Science Educator in Training, Pacific Science Center May 2014 – August 2018

Lead English Teacher, Little Masters Club (Ankang, China) March – August 2017

Communication Skills

Human Languages: English (Native), Mandarin Chinese (Native), Spanish (Moderately Proficient), Ukrainian (Beginner).

Machine Languages: Python, Java, C, C#, Scala, Scheme, HTML, TypeScript.

Big Data Technologies: AWS (S3, Athena, Redshift, Lambda), SQL, MongoDB, Neo4J, OrientDB.

Version Control: Git, SVN.

Last updated: October 3, 2022