EDUCATION

University of Wisconsin-Madison

Madison, WI

Ph.D. in Psychology

Sep 2021 - May 2026 (Expected)

B.A. in Computer Sciences and Economics \cdot Comprehensive Honors \cdot GPA: 3.64 Sep 2017 - Dec 2020

WORK EXPERIENCE

Austerweil Lab, UW-Madison Department of Psychology

Madison, WI

Research Assistant

Apr 2018 - Aug 2021

- Worked on research projects in computational cognitive science such as language and memory.
- Duties include software development, data analysis, academic writing, mentoring, etc.

Division of Information Technology (DoIT), UW-Madison

Madison, WI

Web Developer

Nov 2018 - Jun 2021

- Frontend development for campus-wide applications such as user portal and course enrollment.
- UI, UX, and accessibility improvements for applications and open-source web components.

CS 537: Operating Systems, UW-Madison

Madison, WI

Teaching Assistant

Jan 2020 - May 2020

- Held regular in-person and virtual office hours on OS knowledge and debugged C issues.
- Provided additional help by answering questions on the online course forum. Proctored exams.

Projects

Follow-up on Predictors of L2 word learning accuracy: A big data investigation R

A follow-up work of a regression analysis on second language (L2) learning accuracy using Duolingo data. Testing whether some psycholinguistic word level factors are good predictors of L2 learning. In progress.

A Question Answering (QA) Pipeline Python, PyTorch

Surveying transfer learning performances of the BERT pipeline on domain-generic and domain-specific QA datasets. Developing a new QA pipeline using psycholinguistic features. In progress.

 $\label{lem:course_search} \textbf{Course Search \& Enroll (CSE)} \ \textit{Angular, TypeScript, Sass, Elasticsearch, Google Analytics $$ $$ $$ https://git.doit.wisc.edu/adi-ia/course-search-enroll-fe$

An Angular rewrite of the old frontend. Implemented core features in Search, My Courses, and Scheduler tabs. Deployed to production and currently used by over 40,000 UW-Madison students.

How does modern life affect memory retrieval: Analyzing news headlines Python, PyTorch https://virtual.mathpsych.org/presentation/78

Using 1919-2019 New York Times headlines data, analyzing changes of the frequency, recency, and spacing effects. Also tracked top words and divided them into two sets: fluid and static. Presented virtually at MathPsych 2020 and wrote a senior thesis in Dec 2020. Follow-up work is in progress.

SNAFU: Semantic Network and Fluency Utility Python, NW.js

https://alab.psych.wisc.edu/snafu

Developed a software tool for psychologists to estimate knowledge representations from memory retrieval data using network analysis. Added core data analyzing features and refactored the main random walk algorithm for semantic network estimation. Published one journal article.

SKILLS

Programming Languages: Python, JavaScript, Java, C/C++, SQL, R/STATA, MATLAB

Frameworks and Platforms: Angular, PyTorch, Spring Boot, React

Productivity: Git, Linux, LATEX

Natural Languages: Chinese (Mandarin), English, some Japanese

RECOGNITION

Senior Thesis Scholarship

UW-Madison L&S Honors Program

\$3,000 funding for my senior thesis project. Selection based on the project proposal. May 2020

ACTIVITIES

Mathematical Contest in Modeling

Madison, WI

Received the Meritorious Award for being the top 10% among over 10,000 submissions.

Feb 2018

ACM-ICPC North Central North America Regional Contest

Verona, WI

Ranked the 22nd among 207 teams on data structures and algorithms.

Nov 2017