Aaron Gluck

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Aaron Gluck

Education

University of Colorado Boulder 2028 (Expected)
Ph.D. of Computer Science GPA: 4.0
Advisor: Maria Pacheco

University of Delaware 2023
B.S. of Computer Science GPA: 4.0
Summa Cum Laude, Dean's List for Duration

Delaware Technical and Community College 2021
A.A.S. of Computing and Information Science GPA: 4.0
Summa Cum Laude, President's List for Duration

Publications

Aaron Gluck and Maria Pacheco. 2025. Inquiring Machines Want to Know: Toward a Knowledge-Seeking Framework for Learning with LLMs. *Under Review – Preprint available upon request.*

Aaron Gluck, Katharina von der Wense, and Maria Leonor Pacheco. 2025. CLIX: Cross-Lingual Explanations of Idiomatic Expressions. *Findings of the Association for Computational Linguistics: ACL 2025*

Research Interests

Knowledge-Seeking, Reasoning, Educational Applications of NLP, Neuro-Symbolic Methods, Multilingual NLP

In-Progress Experiments & Studies

Knowledge-Seeking

I am currently developing a new model training paradigm which aims to teach models how to effectively ask for knowledge that will help them learn. This framework, based on the educational theory of inquiry, integrates question generation into various tasks in order to ensure the model is able to obtain whatever information is necessary to complete those tasks. Initial use-cases are in the domains of natural language inference and classroom learning.

Teaching[1]

CSCI 2824: Discrete Structures (*1 semester*) Summer 2024
Instructor of Record

Independently redesigned course from the ground up, receiving approval from the department lead for undergraduate curriculum. Prepared lecture materials for 40 students, including content geared towards a comprehensive understanding of concepts in discrete mathematics necessary for computer science students. Provided 3 hours of office hours per week to assist students.

[1]This list is ordered first by importance of role and then by descending order of course difficulty.

CSCI 5832: Natural Language Processing (*1 semester*) Spring 2025
Teaching Assistant

Independently created assignments to evaluate graduate student understanding of core concepts in natural language processing for a class size of 100. Collaboratively developed rubrics for and graded student work. Advised on and implemented practices regarding detection of unauthorized AI use. Provided 1 hour of office hours per week to assist students.

CSCI 2820: Linear Algebra (*1 semester*) Fall 2024
Teaching Assistant

Collaboratively designed assignments (and corresponding grading rubrics) that helped students construct comprehensive understanding of linear algebra at the undergraduate level. Assisted the instructor of record with redesign of course policies to ensure academic integrity in a class size of 80. Provided 3 hours of office hours per week to assist students.

CSCI 2270: Data Structures (*3 semesters*) Fall 2023, Spring 2024, Fall 2025
Teaching Assistant

Prepared lecture materials for and provided lecture to up to 45 students in smaller interactive learning sessions separate from main lecture. Collaboratively updated assignments to build student proficiency in the use of particular data structures and algorithms. Acted as a primary advisor for course policies and management. Provided 3-5 hours of office hours per week to assist students.

Employment

Undergraduate Research Assistant January 2022 – May 2023
University of Delaware: Data Science Institute

PI: Vijay Shanker

Researched and designed a rule-based function sentence extractor to create a dataset for a machine learning experiment. Gathered data from PubMed entries by tagging relevant gene/protein mentions to create sentences describing their functions that would later be reviewed by UniProt annotators – lessening the burden on annotators to read the entire text.

Programming and IT Intern September 2020 – December 2021
University of Delaware: Center for Experimental and Applied Economics

Maintained a web-based Optimization Decision Support Tool (ODST). Additionally assisted in other software development projects for postdoctoral fellows. Informed and implemented decisions on data security practices.

Awards

Outstanding Teaching Assistant Award 2025
Awarded to 10 teaching assistants in the Computer Science department at the University of Colorado Boulder ($500)

John K. Scoggin Sr. Memorial Award 2023
Awarded to a single student each year for *Outstanding Undergraduate Bioinformatics Research* ($500)

Phi Theta Kappa Honor Society 2019 – 2021
Invited Member

Travel Grants

CU Boulder Computer Science Departmental Conference Travel Grant 2025
Awarded to students traveling to present their research at eligible conferences ($2000)

Reviewer Service

Reviewer

ACL Rolling Review 2025 (EMNLP ’25)

Sub-Reviewer

ACL Rolling Review 2023 (EACL ’24)

Skills

4+ Years of AI/ML Research
Programming (YRS): Python (5), C/C++ (2), Julia (0.5)
Packages/Libraries: PyTorch, HuggingFace, CUDA, OpenMP, MPI