

Hamed Yaghoobian

Department of Math and Computer Science
Muhlenberg College
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EDUCATION

- Ph.D. Computer Science, University of Georgia, Athens, GA, 2021
Thesis: Structure-and Context-aware NLP Approaches to Emotion and Subjectivity
Advisor: Khaled Rasheed
- B.Sc. Electrical Engineering, Azad University, Mashhad Branch, Iran, 2011
Thesis: Design and implementation of a DSP-based speech noise cancellation system on Altera Cyclone II FPGA
Advisor: Ali A. Khazaei

ACADEMIC EMPLOYMENT

2021–present Department of Math & Computer Science, Muhlenberg College, Allentown, PA
Tenure Track Assistant Professor

RESEARCH AREAS

- Natural Language Processing (NLP)
- Interdisciplinary Studies in Human-AI Interaction and Science and Technology Studies (HAI & STS)

TEACHING EXPERIENCE

Muhlenberg College, Math & Computer Science Department

Assistant Professor

- Fall 23 Introduction to Game Programming with Python (n=25 across 2 sections)
Computer Science II (n=10)
- Spring 23 Introduction to Game Programming with Python (n=9)
Computer Organization (n=26)
Human-Computer Interaction (*Special Topics*) (n=8)
- Fall 22 Introduction to Game Programming with Python (n=32 across 2 sections)
Web Software Development (n=25)
- Spring 22 Introduction to Game Programming with Python (n=11)

Computer Organization (n=26)
Fall 21 Introduction to Game Programming with Python (n=32 across 2 sections)
Computer Networks (n=12)

University of Georgia, Computer Science Department

Instructor of Record

2020–2021 Topics in Computing (n=40)
2018–2019 Graduate Teaching Seminar (n=30)

Lab Instructor

2020 Introduction to Computing and Programming (n=90)

Teaching Assistant

2020 Computer Architecture
2017–2019 Computer Networks
2017 Software Development
2016 Discrete Mathematics for Computer Science

Azad University, Mashhad Branch, Electrical and Computer Engineering Department

Undergraduate Teaching Assistant

2011 Computer Architecture

Academic Center for Education, Culture and Research, Iran, Language & Literacy Ed. Department

2007–2016 English as a Second Language (ESL) Teacher

PUBLICATIONS

* indicates equal contribution.

Articles in Peer-Reviewed Journals

2023 Voghoei, S., Byars, JM., King, SJ., Shapouri, S., **Yaghoobian, H.**, Rasheed, KM., Arabnia, HR. “Students Success Modeling: Most Important Factors.” *IEEE Access*.
2021 Kuecker, E., Harris, M., Tesler, J., **Yaghoobian, H.** “The Ethos of Citation in Qualitative Research Methodology.” *Reconceptualizing Educational Research Methodology (RERM)*.

Conference Proceedings

2014 Alipoor, A., Shaerbafe, S., Khazaei, A., **Yaghoobian, H.** “A Novel Multicarrier Transmission Chaotic Communication System.” *SASTech 8th*.
2011 **Yaghoobian, H.**, Khazaei, A., Zarchi, M., Hosayni, J. “Modeling of a Robust and Fast Noise Cancellation System.” *UKSim 5th European Symposium on Computer Modeling and Simulation Annual Meeting, IEEE*. doi.org/10.1109/EMS.2011.78

Selected Presentations

- 2023 **Yaghoobian, H.** “Plasticity of Data and the Problematics of Containment,” *2023 Society for the Social Studies of Science (4S) Conference.*, Honolulu, HI.
- 2022 **Yaghoobian, H.** “Phenomenology of Generative/Predictive Word Processing,” *Oxford Connected Life 2022 Conference.*, Oxford, UK.
- 2021 **Yaghoobian, H.**, Kuecker, E. “Phenomenology of Word Processing Software.” *The Association for Computers and the Humanities (ACH '21).*
- 2021 **Yaghoobian*, H.**, Kuecker*, E. “Ethics of Critical Engagement in Positivist Enterprises.” *Southeast Philosophy of Education Society (SEPES '21).*

Abstracts & Posters

- 2021 **Yaghoobian, H.** “Pedagogical Possibilities of Critical Engagement in Introductory CS Education.” *52nd ACM Technical Symposium on Computer Science Education (SIGCSE)*, doi.org/10.1145/3408877.3439659

Manuscripts in Preparation

- 2024 **Yaghoobian*, H.**, Rezayi*, S., Arabnia, H., Rasheed, K. “Experience Affected in the Act of Remembering: A Study of Discursivity of Verb Tense Shifts in Memory Narrative.” Intended for: *Journal of Cultural Analytics.*
- 2024 **Yaghoobian*, H.**, Soleymani*, S. “Fairview: Unmasking Gender Bias in Language Models Using Linguistic Inquiry and Word Count (LIWC)”.
- 2024 **Yaghoobian, H.** “The Writer In-between: A Post-phenomenological Analysis of Generative Word Processing and its Implications for Writer-Tool Relationships.” Intended for: *Journal of Human-Technology Relations.*

GRANTS, FELLOWSHIPS, AND AWARDS

Awards and Honors

- 2019 Outstanding Teaching Assistant Award
- 2018 Graduate School Teaching Seminar Assistantship Award

Grants and Fellowships

- 2023 ITVS Feature Documentary Film Proposal
Project advanced to the second round of reviews by ITVS
- 2023 Summer Research Grant
8-week grant of \$4,000 awarded
- 2022 New Course Development Grant
4-week grant of \$1,000 awarded to develop a new course in Web Development
- 2019 Student Scholarship Award, Professional Organization of Iranian Americans

PROJECTS & CREATIVE WORKS

Art After-Life: The AI Resurrection of Osvaldo Romberg

June 2023 – Present

Description

Art After-Life is a feature documentary film that delves into the posthumous recreation of the voice and linguistic patterns of the renowned artist, Osvaldo Romberg. By employing advanced generative AI modeling, this project endeavors to resurrect the artist's voice, presenting a unique confluence of art, memory, and state-of-the-art technology.

Role & Contributions

- Partnered closely with the director, David Romberg, in envisioning and actualizing the incorporation of AI-generated voice into the film's storyline.
- Led the technical evolution of the AI model, ensuring its adeptness in mirroring Osvaldo Romberg's unique vocal characteristics and speech patterns.
- Undertook extensive research, gathering Osvaldo Romberg's interviews, speeches, and other vocal recordings to adeptly train the AI model.
- Confronted and meticulously navigated the ethical ramifications inherent to posthumous voice recreation, underscoring the project's dedication to celebrating the artist's legacy with profound respect and sensitivity.
- Contributed to a related grant proposal (see Grants) that has successfully advanced to the second round of reviews by ITVS.

UNDERGRADUATE RESEARCH SUPERVISED

Summer 2022 Christian Johnsonson, *The Correspondence of Walter Benjamin*, Funded by the Provost Office.

Fall 2023 Matthew DeGirolamo, *"Emotion Analysis on Student Perceptions of Online Privacy in the Post-COVID Era and Explainable AI (XAI) Using SHAP Analysis"* - Senior Project (Unfunded).

SERVICE

Reviewer Roles

Served as a peer reviewer for various academic conferences and journals within the fields of computer science, technology, and humanities:

- IEEE International Conference on Robotics and Automation (ICRA) [2023–]
- International Conference on Language Resources and Evaluation combined with International Conference on Computational Linguistics (LREC-COLING) [2023–]

- Association for the Advancement of Artificial Intelligence on Web and Social Media (AAAI ICWSM) [2023–]
- Association for Computing Machinery’s Conference on Human Factors in Computing Systems (ACM CHI) [2023–]
- Educational Conference on Human-Computer Interaction (EduCHI) [2023–]
- ACM Special Interest Group on Computer-Human Interaction (ACM SIGCHI) [2023–]
- The Radical Philosophy Association [2023–]
- IEEE Access [2022–]
- The Association for Computers and the Humanities (ACH) [2021–]

Committee & Board Membership at Muhlenberg College

Contributed as a member on various committees and advisory boards, focusing on curriculum development, research growth, diversity, and global engagement:

- Member, Math & CS Colloquium Committee [Fall ’21–]
- Member, Faculty Research and Professional Growth Committee [Spring ’23–]
- Member, Diversity, Equity, Inclusion, and Belonging Committee in Math & CS [Fall ’22–]
- Member, Global Advisory Board [Spring ’23–Fall ’23]