Iman YeckehZaare

Postdoctoral Associate, MIT Center for Collective Intelligence | Head of Research, Honor Education | Founder and voluntary project lead, 1Cademy

oneman@mit.edu | oneweb@umich.edu | iman@honor.education | 1iman.com | Google Scholar | GitHub | LinkedIn | ORCID | ACM DL | MIT profile

Office: 1 Main Street, 9th Floor, Cambridge, MA 02142

PROFILE

Researcher and research-infrastructure builder working at the intersection of collective intelligence, human-AI systems, scalable learning, and knowledge-graph infrastructure. I build systems that turn fragmented knowledge into reusable graphs of micro-topics, prerequisite links, claims, ideas, diagnostics, and research pipelines. My current work connects MIT future-of-work ontology research, Honor Education product strategy, and the voluntary 1Cademy research communities.

CURRENT LEADERSHIP AND RESEARCH ROLES

Massachusetts Institute of Technology, Center for Collective Intelligence | Postdoctoral Associate, Cambridge, MA, since Sep 2024
- Lead implementation work around the Work Activity Ontology, AI Peer workflows, ontology endpoints, human-AI evaluation pipelines, and tooling for reasoning about where AI can be used.
- Manage two full-time software developers supporting MIT CCI ontology infrastructure and AI-assisted ontology-development workflows.
- Co-author the arXiv preprint "Where can AI be used? Insights from a deep ontology of work activities," which reorganizes roughly 20,000 O*NET work activities and maps AI software and robotics data onto activity-level structure.

Honor Education | Head of Research, San Francisco, CA, since May 2022
- Manage an interdisciplinary team of full-time researchers, designers, and software developers across research prototypes, product implementation, and institutional learning-system strategy.
- Lead research direction for culture-aware coaching, graph-based adaptive learning, collaborative knowledge construction, AI-enabled research workflows, and human-in-the-loop evaluation.
- Translate research infrastructure into deployable product concepts, including coaching systems, knowledge-map-driven learning pathways, and evidence-centered analytics for institutional partners.

1Cademy Research Communities | Founder and voluntary project lead, since Winter 2020
- Voluntarily develop and manage a multi-institution research community around micro-topic knowledge graphs, prerequisite links, claims, ideas, votes, comments, authorship, and learning pathways.
- Coordinated participation from 2,011 contributors representing 267 institutions; contributors have created 72,268 nodes connected by 374,166 prerequisite links.
- Designed governance and incentive mechanisms for distributed knowledge construction, including proposal workflows, voting, reputation, contribution credit, and reusable graph views for courses and research projects.

EDUCATION

University of Michigan School of Information | Ph.D. in Information, Ann Arbor, MI, Sep 2015 - Dec 2023
- Dissertation: Harnessing Micro-Topics Arranged in Learning Pathways for Spaced Retrieval, Reading, and Collaborative Note-taking. Advisor: Paul Resnick. Committee: Paul Resnick (chair), Eytan Adar, Priti Shah, Christopher Brooks.

University of Michigan School of Information | M.S. in Information, Ann Arbor, MI, Sep 2012 - Dec 2014
- Double specialization in Human-Computer Interaction and Information Economics for Management.

Iran University of Science and Technology | B.E. in Information Technology, First-Class Honors, Jul 2007 - Feb 2011

Iran University of Science and Culture | B.E. in Computer Engineering, First-Class Honors, Jul 2007 - Feb 2010

TEACHING EXPERIENCE

University of Michigan School of Information | Courses taught, Ann Arbor, MI, 2017-2021
- Advanced Topics on Web Development - Independent Study, Fall 2018 and Winter 2019.
- Machine Learning and Deep Learning - Independent Study, four semesters across Winter/Fall 2020 and 2021.
- Programs, Information, and People - four semesters across Winter/Fall 2018 and 2019.
- Data Exploration - Winter 2017.

AWARDS AND HONORS

- Wikimedia Foundation Research Award of the Year, 2025, for "Motivating Experts to Contribute to Digital Public Goods: A Personalized Field Experiment on Wikipedia."
- Outstanding Graduate Student Instructor of the Year, University of Michigan School of Information, 2018-2019.
- Learning Levers, University of Michigan School of Education, 2019, 3rd Prize; Innovation in Action, 2018, 2nd Prize; Campus of the Future, 2018.
- Michigan Collegiate Innovation Prize, University of Michigan Center for Entrepreneurship, 2013; Michigan I-Corps Graduate.

PROFESSIONAL SERVICE AND PEER REVIEW

- Reviewer for ACM CHI Papers (2024-2026), LAK 2025, CSCW 2026, DIS, IDC, IMX, IUI, and Elsevier journals including Studies in Educational Evaluation and Computers & Education.
- Submitted peer reviews in 2026 for Computers & Education and CSCW 2026; manuscript titles and submission identifiers are omitted to preserve review confidentiality.
- Recognized for an outstanding review for CHI 2024 Papers.
- Completed 12 Precision Conference reviews on time, with no delayed or unsubmitted reviews recorded.

SUBMITTED MANUSCRIPTS AND PREPRINTS

- Cai, A., YeckehZaare, I., Sun, S., Charisi, V., Wang, X., Imran, A., Laubacher, R., Prakash, A., & Malone, T. (2026). Where can AI be used? Insights from a deep ontology of work activities. arXiv preprint. [link]
- YeckehZaare, I. (2026). StrictParity-GraphAudit: When Graph Retrieval Gains Do Not Become RAG Context Gains. Submitted to EMNLP 2026. [PDF]
- YeckehZaare, I. (2026). Placing Before Posting: Contribution-Time Structural Placement in Collaborative Knowledge Production. Submitted to ACM CSCW 2027. [PDF]
- YeckehZaare, I. (2026). Topic-Mixing as an Algorithmic Practice Scheduler: Behavioral Evidence from a Randomized Field Experiment. Submitted to Journal of Learning Analytics. [PDF]
- YeckehZaare, I. (2026). ConceptualGrader: Interactive Provenance and Eligibility Techniques for Auditing Large Language Models in Grading. Submitted to UIST 2026. [PDF]
- Mostagir, M., Chen, Y., & YeckehZaare, I. Strategic Experimentation and Information Design in Dynamic Contests: An Experimental Study. [PDF]
- YeckehZaare, I. (2026). The Epistemic Triad: Auditing Participant-Endorsed Selections in Hybrid Human-LLM Coding. Ready for submission to Field Methods. [PDF]
- YeckehZaare, I. (2026). Participant Self-Coding as Workflow Signal: Codebook Repair and the Concreteness Gradient in Participatory Qualitative Analysis. Near-final manuscript for ACM CSCW. [PDF]

PEER-REVIEWED PUBLICATIONS AND DISSERTATION

- YeckehZaare, I. (2024). Harnessing Micro-Topics Arranged in Learning Pathways for Spaced Retrieval, Reading, and Collaborative Note-taking. Ph.D. dissertation, University of Michigan. [link]
- YeckehZaare, I., & Resnick, P. (2025). Counting days is a spacing incentive that unlocks the potential of low GPA students. npj Science of Learning, 10, Article 35. [link]
- Chen, Y., Farzan, R., Kraut, R., YeckehZaare, I., & Zhang, A. F. (2024). Motivating Experts to Contribute to Digital Public Goods: A Personalized Field Experiment on Wikipedia. Management Science. [link]
- YeckehZaare, I., Chen, S., & Barghi, T. (2023). Reducing Procrastination Without Sacrificing Students' Autonomy Through Optional Weekly Presentations of Student-Generated Content. SIGCSE. [link]
- YeckehZaare, I., Mulligan, V., Ramstad, G. V., & Resnick, P. (2022). Semester-level Spacing but Not Procrastination Affected Student Exam Performance. LAK. [link]
- YeckehZaare, I., Grot, G., & Aronoff, C. (2022). Retrieval-based Teaching Incentivizes Spacing and Improves Grades in Computer Science Education. SIGCSE. [link]
- YeckehZaare, I., Grot, G., Dimovski, I., Pollock, K., & Fox, E. (2022). Another Victim of COVID-19: Computer Science Education. SIGCSE, 913-919. [link]
- YeckehZaare, I., Fox, E., Grot, G., Chen, S., Walkosak, C., Kwon, K., Hofmann, A., Steir, J., McGeough, O., & Silverstein, N. (2021). Incentivized Spacing and Gender in Computer Science Education. ICER, 18-28. [link]
- YeckehZaare, I., Fox, E., Wood, S., & Grot, G. (2021). Improving Collaborative Notetaking Through Finding and Visualizing Prerequisite Knowledge Links. ACM Collective Intelligence Conference.
- YeckehZaare, I., Barghi, T., & Resnick, P. (2020). QMaps: Engaging Students in Voluntary Question Generation and Linking. CHI. [link]
- Ericson, B., YeckehZaare, I., & Guzdial, M. (2019). Runestone Interactive Ebooks: A Research Platform for On-line Computer Science Learning. SPLICE Workshop at ICER. [link]
- YeckehZaare, I., Resnick, P., & Ericson, B. (2019). A Spaced, Interleaved Retrieval Practice Tool that is Motivating and Effective. ICER. [link]
- YeckehZaare, I., & Resnick, P. (2019). Speed and Studying: Gendered Pathways to Success. SIGCSE, 693-698. [link]
- Chen, Y., YeckehZaare, I., & Zhang, A. F. (2018). Real or bogus: Predicting susceptibility to phishing with economic experiments. PLOS ONE, 13(6), e0198213. [link]

MANUSCRIPTS IN PREPARATION AND ACTIVE RESEARCH PIPELINE

- YeckehZaare, I. (2026). 1Cademy: Progressive Disclosure for Collaborative Authoring and Local Inspection of Large Prerequisite Graphs. In preparation. [PDF]
- YeckehZaare, I., & Resnick, P. 1Cademy: Social Note-Taking in a Knowledge Graph of Micro-topic Based Learning Pathways (KGMLP).
- YeckehZaare, I., Barghi, T., Cai, J., Brown, B., Truong, L., & Resnick, P. Audited Hybrid-Map versus multi-page Novakian bundles: a delayed-recognition cost in study-consumption (within-subject mixed-methods experiment; N=419; nine passages; three sessions).
- Chen, Y., YeckehZaare, I., & Zhang, A. F. Impacts of Project Membership on Contribution to Wikipedia: Evidence from a Difference-in-Difference Matching Estimator.
- Do LLMs Hallucinate Taxonomy? A WordNet-Free Benchmark Reveals Structural Errors Beyond Lexical Overlap. Target venue: TACL.
- Synonym Leakage in Biomedical Ontology Retrieval Benchmarks Inflates Lexical Performance and Alters Model Rankings. Target venue: Journal of Biomedical Informatics.
- Preventing False Discoveries in Synthetic Societies: A Claim-Gated Measurement Framework. Target venue: CSCW.
- When a Spaced-Repetition Scheduler Looks Fair but Distributes Burden Unequally: A Process Audit of Late-Night Practice in the SM-2 Scheduling Algorithm. Target venue: Journal of Learning Analytics.
- Broadcast, Conversation, and Surface-Specific Public Feedback in an Open AI-Agent Social Network. Target venue: Social Network Analysis and Mining.
- Where Public AI Tool Markets Form: Reusable Workflows Track Listed Product Variety More Strongly Than Occupation-level Hiring Demand. Target venue: Nature Machine Intelligence.