

NURSAH YAKUT

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EDUCATION

Purdue University, US

Ph.D, Learning Design and Technology

Advisors: Dr. Marisa Exter and Dr. William Watson

August 2022 - Ongoing

3.92/4.00

Gazi University, Turkey

M.Sc, Assessment and Evaluation in Education

Thesis: Comparison of Classification Accuracy Indices within the Scope of Item Response Theory

Advisor: Dr. Emine Onen

September 2019 - August, 2022

3.89/4.00

Balikesir University, Turkey

B.Sc, Mathematics Education

September 2015 - May 2019

3.48/4.00

PROFESSIONAL EXPERIENCE

The Wabi Center for Youth Development, Westside Robotics, US

Instructional Design Intern

2026 - Ongoing

- Conducting needs assessments via interviews, surveys, and program observations to identify essential skills, effective practices, and knowledge gaps.
- Designing and developing inclusive training modules for FIRST Robotics mentors, focusing on neuro-diverse learners and equitable team practices.
- Collaborating with leadership to plan and structure professional development workshops for volunteer mentors.
- Translating educational research into practical mentor-facing resources on inclusion, behavioral strategies, and communication.
- Supporting evaluation planning and implementation for mentor training initiatives.

Department of Curriculum and Instruction at Purdue University, US

Graduate Research Assistant and Instructional Designer

2024 - Ongoing

- Collaborating on the Engineering Character Initiative (ECI), a multi-institutional project focused on integrating character development into undergraduate engineering and computing courses.
- Lead weekly design consultations with computing faculty to align learning outcomes, assessment strategies, and character-focused instructional interventions.
- Designed and implemented three interactive case studies using H5P in engineering capstone courses; conducting a design-based research (DBR) study to evaluate their impact on students' ethical reasoning and professional decision-making.
- Participate in a cross-institutional Delphi study.
- Developing Open Educational Resources (OER).
- Assisting in the redesign of technical coursework to integrate character-building elements and promote lifelong learning in professional contexts.
- Contributing to the dissemination of project findings through academic presentations and professional publications.
- Mentor graduate students on instructional design practices and research development.

Office of Undergraduate Research (OUR) at Purdue University, US

2023 - 2024

Graduate Research Assistant

- Contributed to projects such as Competency-Based Undergraduate Research Experiences (CUREs) and the development of Learning Contracts to enhance mentor-mentee relationships.
- Mentored undergraduate research interns, providing guidance on research methodologies and fostering their professional growth.
- Led qualitative data coding and analysis efforts in collaboration with undergraduate interns, identifying key themes to inform program improvements.

Department of Curriculum and Instruction at Purdue University, US

2022 - 2024

Graduate Research Assistant

- Volunteered to contributed to the NSF-funded project DEAP (DEAPening Employer-Academic Partnerships), a 3 million dollars, multi-disciplinary, multi-institutional initiative aimed at advancing competency-based education in computing.
- Collaborated with the Purdue Competency Research Team along with faculty members and researchers from 8 universities.
- Developed Open Educational Resources (OER) to support educators.
- Designed a survey instrument to collect data, contributing to the project's research on improving computing curricula.
- Conducted pilot tests for the survey instrument to ensure clarity, reliability, and validity before full deployment.

TEACHING EXPERIENCE

Purdue University, US

Spring 2026

Co-Instructor

- Co-teaching an online course: Educational Applications of Multimedia.
- Redesigned course assignments to enhance alignment with learning outcomes and applied practice.
- Ensured all course materials met accessibility standards (WCAG), improving usability and inclusivity.
- Managed grading and provided detailed, formative feedback on student work.
- Moderated discussion forums and supported overall course administration.

Purdue University, US

Spring 2025

Co-Instructor

- Co-taught an online course: Educational Video Game Design.
- Managed grading and provide detailed feedback on student assignments.
- Moderated discussion forums and support overall course administration.

Fatih Middle School, Turkey

Spring 2019

Trainee Teacher

- Organized classes and supported students' educational and social needs during and outside of lessons.

General Kemal Balikesir Middle School, Turkey

Fall 2018

Trainee Teacher

- Assisted in the educational and social development of students under the supervision of the main teacher.

Teaching Mathematics Subject, Turkey

Fall 2016 - Spring 2019

Mathematics Tutor

- Provided personalized instruction to students, focusing on improving their understanding and performance in mathematics.

PEER REVIEWED PUBLICATIONS

Exter, M., **Yakut, N.**, Tagare, D., & Sabin, M. (2025). WIP: How do computing professionals and faculty rank the importance of dispositions and cross-disciplinary skills? *2025 IEEE Frontiers in Education Conference (FIE)*, 1–5. <https://doi.org/10.1109/fie63693.2025.11328210>

Yakut, N. (2025). Work-in-progress: Systematic review of competency assessment methods in computing education. *Proceedings of the 56th ACM Technical Symposium on Computer Science Education*, 1764–1764. <https://doi.org/10.1145/3641555.3705060>

Yakut, N. & Önen, E. (2025). Comparison of classification accuracy and consistency indices under the item response theory. *International Journal of Educational Studies and Policy*, 6(1), 90–105. <https://doi.org/10.5281/zenodo.15075438>

Exter, M., **Yakut, N.**, Sabin, M., Tagare, D., & Ashby, I. (2024). Work in progress: Importance of dispositions on the job: Survey of computing professionals. *2024 IEEE Frontiers in Education Conference (FIE)*, 1–5. <https://doi.org/10.1109/fie61694.2024.10893432>

CONFERENCE PRESENTATIONS

Roodi, F., **Yakut, N.**, Watson, W. R. (Accepted). *GenAI use in computer science: Insider perspectives to inform practice*. [Poster Presentation] American Educational Research Association Annual Meeting (AERA), Los Angeles, CA, United States.

Yakut, N., Yilmaz Yenioglu, B., Yenioglu, S., Aktan, S. (2025). *Examining pre-service teachers' engagement with AI tools: Patterns, perceptions, and ethical considerations* [Concurrent Session]. Association for Educational Communications and Technology Annual Meeting (AECT), Las Vegas, NV, United States.

Yenioglu, S., Yilmaz Yenioglu, B., **Yakut, N.** (2025). *AI-Driven interventions for students with learning disabilities: A future perspective* [Presidential Session]. Association for Educational Communications and Technology Annual Meeting (AECT), Las Vegas, NV, United States.

Yakut, N. (2025). *Systematic review of disposition assessment methods in higher education* [Roundtable Presentation]. American Educational Research Association Annual Meeting (AERA), Denver, CO, United States.

Yakut, N. (2025). *Work-in-Progress: systematic review of competency assessment methods in computing education* [Student Research Competition]. The Technical Symposium on Computer Science Education (SIGCSE TS), Pittsburgh, PA, United States.

Yakut, N. & Zywicki, C. (2024). *Agreements, contracts, or compacts: Uncovering the expected learning in mentor-mentee relationships* [Live Oral Presentation]. ConnectUR 2024 Annual Conference, virtual.

Yakut, N. & Childress, A. (2024). *Bridging theory and practice: Enhancing career readiness through undergraduate research* [Share and Solve]. ConnectUR 2024 Annual Conference, virtual.

Yakut, N. (2023). *The effects of intelligent tutoring systems on students' motivation in mathematics education: A systematic literature review* [Poster Presentation]. Annual Graduate Student Education Research Symposium (AGSERS), West Lafayette, IN, United States.

Yakut, N. & Onen, E. (2022). *The comparison of classification accuracy indices within the scope of item response theory* [Paper Presentation]. International Young Researchers Congress-II (GUGAK-2022), virtual.

LEADERSHIP, SERVICE, AND COMMUNITY ENGAGEMENT

Reviewer, American Educational Research Association Annual Meeting (AERA), 2025
Judge, FIRST Indiana Robotics Competition, 2025
Judge, Fall Undergraduate Research Expo, 2025
Judge, Spring Undergraduate Research Expo, 2025
Volunteer, Purdue Aviation Day, Youth Activities, 2025
Judge, Fall Undergraduate Research Expo, 2024
Treasurer, Purdue Association of Learning Design and Technology (PALDT), 2023–2024
Volunteer, Physics is Fun Project, 2022–2023
Volunteer, Imagination Station, 2022–Present
Project Coordinator, Mutlu Patiler Project, Toplum Gönüllüleri Vakfı (TOG), 2018–2019
Project Coordinator, Nar Project, Toplum Gönüllüleri Vakfı (TOG), 2017–2018
Volunteer, Bilim Tırı Project, Balıkesir University Mathematics Society, 2016–2017
Voluntary Teacher, Matematik Cepte Project, Balıkesir University Mathematics Society, 2015–2019

GRANTS AND AWARDS

Graduate Student Conference Support Award(\$750), Purdue University College of Education
Travel Grant (\$500), The 56th ACM Technical Symposium on Computer Science Education

PROFESSIONAL ORGANIZATIONS MEMBERSHIP

Association for Educational Communications and Technology (AECT)
American Educational Research Association (AERA)
Association for Computing Machinery (ACM)
ACM Special Interest Group on Computer Science Education (SIGCSE)