

SUGANA CHAWLA

Associate Professor of the Practice | Data Science Education Program Director

Lucy Family Institute for Data & Society, University of Notre Dame
236 Flanner Hall, Notre Dame, IN 46556 | schawla@nd.edu | 574.631.2882

[Google Scholar](#) | [LinkedIn](#) | [Notre Dame Profile](#)

PROFILE

Academic leader and practitioner-scholar in data science and responsible AI education, focused on how experiential, community-engaged, and gamified learning can broaden K–16 pathways into STEM and healthcare careers. Directs interdisciplinary education programs at the Lucy Family Institute and leads research and evaluation initiatives spanning curriculum design, educator support, workforce development, and AI-enabled career exploration.

ACADEMIC APPOINTMENTS

- 2024-present** Associate Professor of the Practice, Lucy Family Institute for Data & Society, University of Notre Dame.
Data Science Education Program Director, Lucy Family Institute for Data & Society, University of Notre Dame.
- 2020 – 2024** Education Program Manager (iTREDS), Lucy Family Institute for Data & Society, University of Notre Dame
- 2015 – 2020** Research Project Coordinator, NetHealth Project (PI David Hachen, Sociology), University of Notre Dame

EDUCATION

- 2008** M.A., Education, Frostburg State University, Maryland.
- 2001** B.S., Environmental Science and Policy, University of South Florida.

PROGRAMMATIC FOCUS

- Responsible AI in education, learning, and career development
- K-16 STEM and healthcare career pathways, especially for middle-school and high-school learners
- Experiential data science and AI education for undergraduate students
- Gamified learning, Roblox-based data collection, and educational program evaluation
- Community-engaged STEM outreach, social impact assessment, and interdisciplinary data literacy

ACADEMIC LEADERSHIP AND PROGRAM ADMINISTRATION

Data Science Education Program Director

iTREDS - Interdisciplinary Training and Research in Ethical Data Science

- Directs the iTREDS Scholars Program, coordinating curriculum, faculty mentors, capstone partnerships, and professional development scholars annually.
- Restructuring iTREDS to incorporate a Teaching Fellowship in collaboration with Notre Dame Learning/Office of Digital Learning and NEON, giving iTREDS scholars formal experience in responsible and ethical AI education in addition to research experience.
- Leads capstone, internship, mentorship, and experiential learning components designed to prepare socially responsible data scientists.
- Developing an extern program opportunity as a co-curricular component for iTREDS scholars.

- Leads engagement with external stakeholders to develop iTREDS capstone project topics, identify faculty mentors, and coordinate the capstone project during the course of iTREDS program
- Leads fundraising through corporate partnerships or philanthropy.
- Developing iTREDS experience that can be available broadly to more students, and pivot from a two-year program to a one-year program.

RADIANT - Research, AI, Data Innovation, and New Technologies

- Rebuilt SEEDS into RADIANT, a hands-on AI and data science program for high-school students in Notre Dame Leadership Seminars, supported by iTREDS Scholars as teaching fellows.
- Developed program emphasis on data science, AI, computational thinking, ethics, teamwork, real-world problem solving, and data for social good.
- Developing a larger undertaking for next year, including dedicated fundraising in collaboration with ND Admissions. This program will be re-branded and re-structured.

AI4CAREER - Responsible AI for Career Development

- Co-organized AI4CAREER: Responsible AI for Career Development at Scale in K-16 Education at AIED 2026, convening interdisciplinary work on equity, developmental appropriateness, governance, and responsible design of AI-supported STEM career exploration.
- Developing a partnership with South Bend School System and Educator Externship Program at the South Bend Regional Chamber of Commerce
- Developing a research program in partnership with area schools for NSF proposal focused on career explorations

#GOALS Program Evaluation and STEM/Healthcare Career Pathways

- Lead Principal Investigator for the #GOALS evaluation study with Ascension Foundation for Health Equity, focused on middle-school healthcare and STEM career exploration.
- Leads scalable evaluation and engagement work incorporating experiential learning, gamified data collection, Roblox-based student interaction, surveys, and longitudinal tracking of interest, motivation, confidence, and career pathways.

Data Science Education Program Manager (2020–2024)

- Supported the iTREDS program end to end, including recruitment, curricula, and capstone projects.
- Prepared program reports for NSF.
- Promoted the iTREDS program through campus activities.
- Engaged with external stakeholders to bring real-world projects to students, enhancing experiential learning and career preparation.

Research Project Coordinator (2015–2020)

- Coordinated the NIH-funded NetHealth project under PI David Hachen, including IRB protocols, annual reporting, and budget-related activities.
- Served on the recruitment team and ensured compliance.
- Led procurement and management of devices for the research project.
- Collaborated with students on research activities.

PUBLICATIONS AND SCHOLARLY WORKS

Publications and Accepted Papers:

Chawla, S., Chen, S., Mullagaliyev, A., Metoyer, R., & Chawla, N. V. (2026). Exploring the design of AI tools to support middle school teachers' involvement in students' career interest development. *Companion Publication of the 2026 ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW Companion)*. Accepted for publication.

Chawla, S., Chen, S., Qian, J., Svarovsky, G., Cheng, Y. A., Johnson, R., Chawla, N. V., & Metoyer, R. (2026). AI4CAREER: Responsible AI for STEM career development at scale in K–16 education. In E. G. Blanchard, G. Chen, M. Chi, & S. Isotani (Eds.), *Artificial intelligence in education: AIED 2026* (Communications in Computer and Information Science, Vol. 3033, pp. 3–8). Springer.
https://doi.org/10.1007/978-3-032-29794-5_1

Kuskova, V., Chawla, S., Kress, R. B., Garrett-Ray, S., & Johnson, R. P. (2026). Inspiring future STEM professionals: Evaluating the impact of the #GOALS Live Experience on middle school students' career interest. In *2026 ASEE Annual Conference & Exposition*. <https://doi.org/10.18260/1-2--60012>

Kuskova, V., Zaytsev, D., Johnson, R. P., Chawla, N. V., & Chawla, S. (2026). From curiosity to capability: Expanding pathways into data and AI through ExLENT. In *2026 ASEE Annual Conference & Exposition*.
<https://doi.org/10.18260/1-2--59584>

Kuskova, V., Chawla, S., Kress, R. B., Garrett-Ray, S., & Jassem, K. R. (2025). Fostering STEM engagement: Evaluating the impact of the #GOALS program on middle-school students' interest and motivation in science and technology. In *2025 ASEE Annual Conference & Exposition*. ASEE Conferences.
<https://doi.org/10.18260/1-2--56594>

Schnur, J. J., Garcia-Martinez, A., Soga, P., Badillo-Urquiola, K., Botello, A. J., Calderon Raisbeck, A., Chawla, S., Ernst, J., Gentry, W., Johnson, R. P., Kennel, M., Robles, J., Wagner, M., Medina, E., Garduno Espinosa, J., Marquez-Gonzalez, H., Olivar-Lopez, V., Juarez-Villegas, L. E., Aviles-Robles, M., . . . Chawla, N. V. (2024). SaludConectaMX: Lessons learned from deploying a cooperative mobile health system for pediatric cancer care in Mexico. In *Companion Publication of the 2024 Conference on Computer-Supported Cooperative Work and Social Computing* (pp. 316–322). Association for Computing Machinery. <https://doi.org/10.1145/3678884.3685922>

Kuskova, V., Chawla, N., Chawla, S., Wood, D., & Conrado, A. (2024). Board 411: Training socially responsible and engaged data scientists: Lessons from four student cohorts. In *2024 ASEE Annual Conference & Exposition*. ASEE Conferences. <https://doi.org/10.18260/1-2--47000>

Refereed Abstracts

Kuskova, V., Chawla, S., Kress, R. B., Garrett-Ray, S., & Jassem, K. R. (2026). GOALS for science: Validating a gamified approach to data collection on Roblox [Conference abstract]. *20th International Conference on Educational and Instructional Technology (ICEIT 2026)*, Tokyo, Japan. Abstract.

Manuscripts Under Review and Preprints

Chawla, S., Chen, S., Mullagaliyev, A., Prono, G., Conrado, A.-M., Howard, D., Kuter, K., Mustillo, T., Wedrychowicz, C. M., Abbasi, A., Metoyer, R., & Chawla, N. V. (2026). *An interdisciplinary undergraduate pathway in responsible AI: Course design and early-career outcomes* [Manuscript submitted for publication]. Educational Advances in Artificial Intelligence (EAAI-27).

Chen, S., Chen, X., Mullagaliyev, A., Nwanganga, A., Hou, S., Pan, D., Metoyer, R., & Chawla, S. (2026). “We are not pigeonholing”: Understanding how educators configure GenAI support for open-ended learning—An exploratory study of K–12 career exploration [Manuscript submitted for publication]. ACM CHI Conference on Human Factors in Computing Systems (CHI 2027).

Molnar, I., Li, P., Chen, S., Chawla, S., Lang, J., Metoyer, R., Hua, T., & Chawla, N. V. (2026). *TeachingCoach: A fine-tuned scaffolding chatbot for instructional guidance to instructors* [Preprint]. arXiv. <https://doi.org/10.48550/arXiv.2603.18189>

RESEARCH GRANTS AND FUNDING

Research Grants

#GOALS (Go Out and Love Science) Program Assessment - Phase II, Year 2 Award. Ascension Foundation for Health Equity. Role: Lead Principal Investigator. Awarded 01/20/2025. Amount: \$1,306,46. Funded.

Explorations: Data Crossings - Bridging to AI and Data Science Careers through Experiential Learning and Training. National Science Foundation ExLENT Program, Award #2526307. Role: Co-Principal Investigator. 2025 - 2028.. Amount: \$997,523. Funded.

#GOALS (Go Out and Love Science) Program Assessment - Phase I, Ascension Foundation for Health Equity. Role: Co-Principal Investigator. 2024 - 2025. Amount: \$286,168. Funded.

Corporate and Philanthropic Support (Gifts)

Surescripts Fund for iTREDS, Surescripts. Corporate gift supporting the iTREDS Scholars Program, including student stipends, experiential learning, mentorship, curriculum development, and program operations. Amount: \$150,000. Committed; pending final agreements.

iTREDS Scholar Endowment, \$100,000, Barbara Rapchak and Kevin Keiper Endowment for Excellence, 2025.

Submitted:

Co-Designing Family-Centered Learning Interventions in Informal Settings to Foster Generative AI Literacy During Early Adolescence. Co-PI. Submitted to Lego Foundation. \$300,000

Proposal in Development

Designing AI-Supported Systems to Empower Educators and Prepare Adolescents for Emerging STEM Workforce Pathways, Lead PI. To be submitted to NSF.

SELECTED PRESENTATIONS AND WORKSHOPS

GOALS for science: Validating a gamified approach to data collection on Roblox. Conference presentation, 20th International Conference on Educational and Instructional Technology (ICEIT 2026), Tokyo, Japan, 2026.

Inspiring future STEM professionals: Evaluating the impact of the #GOALS Live Experience on middle school students' career interest. Conference presentation, American Society for Engineering Education Annual Conference & Exposition, Charlotte, NC, 2026.

From curiosity to capability: Expanding pathways into data and AI through ExLENT. Poster presentation, American Society for Engineering Education Annual Conference & Exposition, Charlotte, NC, 2026.

Fostering STEM engagement: Evaluating the impact of the #GOALS program on middle-school students' interest and motivation in science and technology. Conference presentation, American Society for Engineering Education Annual Conference & Exposition, Montreal, Canada, 2025.

Building pathways into data science and responsible AI: Experiential learning at the Lucy Family Institute. Invited presentation at Hesburgh Women of Impact, University of Notre Dame, Notre Dame, IN, 2025.

Board 411: Training socially responsible and engaged data scientists: Lessons from four student cohorts. Conference presentation, American Society for Engineering Education Annual Conference & Exposition, Portland, OR, 2024.

SERVICE

- Education Track Co-Chair, RISE AI South America Summit, Universidad de los Andes, Santiago, Chile, 2026.
- Workshop Co-organizer, *AI4CAREER: Responsible AI for Career Development at Scale in K–16 Education*, 27th International Conference on Artificial Intelligence in Education (AIED 2026), Seoul, Republic of Korea, 2026.
- Member, Search Committee for Director of the Lucy Family Institute for Data & Society, University of Notre Dame, 2026.
- Co-Chair, Education & Workforce of the Future Track, RISE AI Conference, University of Notre Dame, 2025.
- Lucy Family Institute: Department of Development and donor engagement, internship programming, search committee.

ADDITIONAL PROFESSIONAL EXPERIENCE

Substitute and Special Education Teacher, Allegany County Board of Education, Maryland (2011–2015)

- Substitute teacher for K-8
- Special Education teacher for students in K-8