

## **Abeera P. Rehmat, Ph.D.**

Research Scientist, II

Center for Education Integrating Science, Math, & Computing (CEISMC)

College of Lifetime Learning

Campus Location: Research Administration Building, Room 2213C

<https://lifetimelearning.gatech.edu/node/209>

### **RESEARCH INTERESTS:**

Dr. Rehmat's research explores the intersection of engineering, computer science education, and artificial intelligence, leveraging emerging technologies to improve problem-solving, critical thinking, and practical skills for lifelong learning in both formal and informal settings. She also supports teacher professional development, promoting the effective integration of innovative technologies and research-based practices. By bridging cutting-edge research with real-world education, she empowers learners and educators to think critically, solve complex problems, and cultivate essential 21st-century skills.

### **TEACHING PHILOSOPHY**

My teaching philosophy centers on human-centered, constructivist learning that fosters critical thinking, problem-solving, collaboration, and reflection. I design authentic, problem-based experiences that develop practical skills for lifelong learning. Through collaborative and reflective practices, students gain deep conceptual understanding and professional, ethical, and 21st-century skills. Authentic assessments mirror real-world contexts, and I extend this approach to mentoring, fostering goal-oriented relationships that support students' academic, technical, and professional growth.

### **EDUCATION**

- **Ph.D. in STEM Education, with a Concentration in Engineering Education**  
*University of Nevada, Las Vegas, Las Vegas*
- **M.S. in Elementary Education with a Minor in Educational Technology**  
*Nova South Eastern University, Florida*
- **B.S. in Computer Science with a Minor in Business Administration**  
*St. John's University, New York*

### **SCHOLARLY OUTPUTS**

Ehsan, H., **Rehmat, A. P.**, & Askarian Khanamani, S. (2026). Developing STEM wisdom in neurodiverse gifted learners: An asset-based approach to engineering design for autistic children. *Roeper Review*, 48(1), 51–62. <https://doi.org/10.1080/02783193.2025.2593023>

Choi, J., **Rehmat, A. P.**, Gale, J., Alemdar, M. (2025). Universal design: A study exploring teachers' experiences navigating a curriculum website. *Journal of Information Technology Education: Innovations in Practice*, 24, 026. <https://doi.org/10.28945/5649>

**Rehmat, A. P.**, Towner, A. A., Alemdar, M., Helms, M. E., Rosen, J. H., Moore, R., & Weissburg, M. (2024). Examining an evolving biologically inspired design professional learning environment through conjecture mapping and design-based research. *Biomimetics*, 9(8):468, <https://doi.org/10.3390/biomimetics9080468>. [Editor Choice Article]

**Rehmat, A. P.**, Glazewski, K., & Hmelo-Silver, C. E. (2022). *Contextualizing problem-based learning: An overview of research and practice*. Handbook of Educational Psychology. Oxford University Press.

**Rehmat, A. P.**, Ehsan, H., & Cardella, M. E. (2020). Instructional strategies to promote computational thinking for young learners. *Journal of Digital Learning in Teacher Education (JDLTE)*. 36(1), 46-62. [Outstanding Research Paper Award]