

LEE STEMKOSKI

CURRICULUM VITAE

stemkoski@adelphi.edu • <http://www.stemkoski.net>

Professional Experience

Director, Innovation Center

Adelphi University, 2024 – Present

- Relaunched and developed the Innovation Center into a university-wide hub for interdisciplinary collaboration and emerging technology
- Designed and implemented programming across artificial intelligence, extended reality, and digital studies, including workshops, exhibits, and experiential learning initiatives
- Led partnerships with academic departments, external organizations, and community groups
- Created hands-on technology initiatives including 3D printing services and interactive exhibits
- Developed software to support university operations
- Applied for external funding and established revenue streams
- Trained and supervised full-time staff and team of student workers

Associate Chair, Department of Mathematics and Computer Science

Adelphi University, 2023 – 2025

- Supported departmental operations, initiatives, and curriculum planning

Professor, Department of Mathematics and Computer Science

Adelphi University, 2006 – Present

Lecturer, Department of Mathematics

Dartmouth College, 2003 – 2006

Education

- Ph.D. (2006), M.A. (2003), Mathematics, Dartmouth College
- M.A. (2001), B.A. (2001), Mathematics, Boston University

Scholarly Interests

- Foundations and Applications of Artificial Intelligence
- Virtual Reality and Augmented Reality
- Computer Graphics and GPU Programming
- Multimedia and Video Game Development
- History of Mathematics and Digital Archiving
- Number Theory and its Applications

Recent Publications

Books:

- Stemkoski, L. and Cona, J. *Developing Graphics Frameworks with Java and OpenGL*. Boca Raton, Florida: CRC Press, 2022. ISBN: 978-0367720698.
- Stemkoski, L. and Pascale, M. *Developing Graphics Frameworks with Python and OpenGL*. Boca Raton, Florida: CRC Press, 2021. ISBN: 978-0367721800.
- Stemkoski, L. *Java Game Development with LibGDX*. (second edition) New York: Apress, 2018. ISBN: 978-1484233245.
- Stemkoski, L. and Leider, E. *Game Development with Construct 2*. New York: Apress, 2017. ISBN: 978-1484227831.

Articles:

- Abriata, Luciano, et. al. “MoleculARweb: a Website for Chemistry and Structural Biology Education Through Interactive Augmented Reality”. *Journal of Chemical Education*, Volume 98, Issue 7 (2021)
- Giuffre, C. and Stemkoski, L. “Virtual Temari: Artistically Inspired Mathematics”. *Journal of Humanistic Mathematics*, Volume 10, Issue 2 (2020)

Additional Materials:

- Stemkoski, L. “AI offers higher risks (and some rewards) in hiring cycle.” *Innovate Long Island*, December 2, 2025.
- Stemkoski, L. “Creating Platform-Style Video Games with Construct” (video series) New York: Springer, 2019. ISBN: 978-1484244463.

Recent Undergraduate Research Directed

2025 – 2026

- “Constructing Neural Networks from First Principles”, with Aruzhan Bissenbay ⁽¹⁾
- “Simulating Translucent Color Filters in Virtual Reality ”, with Myra Shamsiev

2024 – 2025

- “Tactile Augmented Reality Engineering”, with Shania Brown
- “Interactive Data Visualization for Global Data Sets”, with Maheen Naqvi
- “Designing Video Games to Build Intuition in Physics”, with Michael Scandiffio ⁽¹⁾

2023 – 2024

- “Star-Shaped Regions in Non-Euclidean Geometries”, with Matthew Klepadlo
- “Philosophy of Mathematics: Provability and Truth”, with Tori de la Hoz
- “Advanced 3D Game Development”, with Rousseau Francois, Ralph Garcia, and Larry Moreno
- “Machine Learning and Procedurally Generated Stories”, with Norah Curran ⁽¹⁾
- “Interactive Web-Based Music Applications”, with Tyler Reid

2022 – 2023

- “Procedurally Generated Music and Computer Graphics”, with Christopher Benson and Faith Mock
- “Interactive Animations for Mathematics Education”, with Faith Mock and Jarred Navarro

Grants

- Developing 3D Graphics Frameworks in Python and OpenGL: An Open-Access Textbook,
Amount: \$25,000 – Epic Games Education MegaGrant 2020
- Virtual Reality: Experiences and Education,
with Cindy Maguire, Ann Holt, and John Drew
Amount: \$4,800 – Adelphi Collaborative Faculty Development Grant 2019
- MSP-Start: Science and Math Applied Real-problem Teaching, Co-Principal Investigator
with Sean Bentley (P.I.), Brumsic Brandon, and Elizabeth DeFreitas,
Amount: \$299,012 – National Science Foundation 2009
- Excelsior Scholars Program, Co-Principal Investigator
with Beth Christensen, Gary Schechter, and Andrea Ward (P.I.)
Amount: \$52,390 – New York State Department of Education 2008

Recent Service

College/University:

- Faculty Senate Committee: Artificial Intelligence 2024 – Present
- Faculty Senate: Department Senator 2019 – 2023
- College Committee: Arts and Sciences Strategic Plan Implementation 2020 – 2022
- Search Committee (Co-Lead): Provost 2021
- University Committee: General Education 2020 – 2021
- Faculty Senate: Vice-Chair 2019 – 2021
- Faculty Senate Committee (Chair): Admissions and Retention 2017 – 2020

National:

- Reviewer for CRC Press 2020 – 2022
- Reviewer for *College Mathematics Journal* 2020
- Associate Editor, *Convergence* 2013 – 2017
- Liaison, Mathematical Association of America (MAA) 2009 – 2015

Recent Awards

- Adelphi University Teaching Excellence Award (for tenured faculty) 2024
- Sabbatical Release Time (research in Computer Graphics) 2021
- Upsilon Pi Epsilon (National Computer Science Honor Society) 2019
- Adelphi University Teaching Excellence Award (for tenured faculty) 2017
- Sabbatical Release Time (research in Computer Graphics and Data Visualization) 2014
- Adelphi University Teaching Excellence Award (for tenure-track faculty) 2011