

Erika S. Mesh

<https://esmesh.github.io> • esmvcs@rit.edu

* Activities from within the past four years are shown in **bold**

EDUCATION

Rochester Institute of Technology (RIT)

2012 M.S., Software Engineering
2006 Graduate Certificate, Systems Engineering
2002 B.S., Software Engineering

HONORS, AWARDS, & FELLOWSHIPS

2022 **RIT GCCIS Outstanding Educator Award**
2022 **RIT Lecturers' Professional Development Grant**
2013 National Science Foundation Graduate Research Fellowship
1997 National Merit Scholar, RIT Kate Gleason Scholar

TEACHING

2019- **Lecturer**, *School of Interactive Games and Media, RIT*
- Game Development and Algorithmic Problem Solving I & II (IGME-105 & IGME-106)
- Game Development Processes (IGME-601)
- IGM Production Studio (IGME-680)
- Independent Study (IGME-599)
- Capstone Design & Development, Process Advisor (IGME-788 & IGME-789)

2018-19 **Visiting Lecturer**, *School of Interactive Games and Media, RIT*
- Game Development and Algorithmic Problem Solving I & II (IGME-105 & IGME-106)
- Game Development Processes (IGME-601)
- Programming for Designers (IGME-609)

2017-18 Adjunct Instructor, *Software Engineering, RIT*
- Introduction to Software Engineering (SWEN-261)

2016 Adjunct Instructor, *Computer Science, RIT*
- Computational Problem Solving (CSCI-603, Intersession)

2012 Teaching Assistant, *Software Engineering, RIT*
- Engineering of Software Subsystems (now SWEN-262)

ADVISING

2022 **MAGIC Maker External Mentor**
A Taste of Culture by Too Many Cooks

2021 **MAGIC Maker External Mentor**
Boiling Over by Plush Bunch
<https://plushbunch.itch.io/boiling-over>

2019 **M.S. Software Engineering Thesis Advisor**
Sayantika Bhattacharya, "*Understanding gaps between established Software Engineering Process knowledge and its actual implementation*", Dec. 2020

- 2019 **M.S. Software Engineering Capstone Advisor**
Raseshwari Pulle, *"Process Discovery & Conformance Analysis"*, Dec. 2019
- 2018-19 **MS GDD Capstone Faculty Committee Member**
DreaMeScape by Walk the Plank Studios
- 2018- **Miscellaneous Undergraduate Advising & Recommendations**
Year 365 faculty interviews + RIT Honors, IGM Ambassador, Outstanding Undergraduate Scholar, Outstanding Graduate Woman Award, and GDD BS/MS application advising and recommendation letters.

SERVICE

Department Committees & Task Forces

- 2022- **IGM Inclusive Teaching Task Force (*in formation*)**
Working with IGM faculty to form a teaching-centric version of the D&I Taskforce. This may prove redundant with the recent announcement of a GCCIS-level task force being formed.
- 2021-22 **IGM Diversity & Inclusion Task Force**
- Active member of all committee meetings
 - Helped plan and run the IGM Friendsgiving Event
 - Initiated and hosted a new "Wednesday Wander" series (casual walks on the last Wednesday of every month)
 - Shared common syllabus language with faculty regarding names & pronouns, diversity, etc.
- 2020- **IGM Graduate GDD Program Committee, *member***
- Active member of all committee meetings
 - Worked with faculty to assess tech needs in the MS GDD grad lab
- 2019 **IGM Undergraduate GDD Program Committee, *observer***
- 2018- **IGM Student Success Task Force, *member***
- Coordinated and implemented the submission process for the 2021 RIT Student Game Showcase
 - Coordinated judging for the showcase Game Impact category

College & University Task Forces

- 2018-19 Graduate Parental Accommodation Committee
RIT Office of Graduate Studies
- 2019 **Foundational Computing – Software Engineering committee**

Community Outreach

- 2022- **MS GDD Capstone Playtesting Exhibit @ RIT Brick City**
- 2022- **Graduate Student Playtesting Exhibit @ Imagine RIT**
- 2019 **Organizer & Instructor**
East House James Papero Enrichment Program @ RIT, June 2019
- <https://esmesh.github.io/east-house-intro-programming/>
- 2019 **Workshop Applicant Selection**
Designing Queer Games: A Conversation with Avery Alder
- 2019 **GDD Accepted Student Open House Speaker**
- 2019 **Graduate Student Project Open House & Playtesting**

Advisory Boards

- 2012-13 RIT Graduate Student Advisory Committee – Chair, 2013
- 2008-11 RIT Software Engineering Industrial Advisory Board
 - Senior Project Sponsor, 2009

PROFESSIONAL DEVELOPMENT

- 2022 **Certified ScrumMaster**
 - Mountain Goat Software
 - ScrumAlliance
- 2021 **Inclusive Pedagogy Learning Community**
 - 7-week program run by Dr. Taj Smith, Director of Diversity Education, RIT
- 2021 **Inclusive Computing Best Practices**
 - *Worked with Sharon Mason to prepare for and then participated in a site visit in support of GCCIS's application for a [Best Practice Grant from Northeastern University's Center for Inclusive Computing](#).*
- 2019 **[Carpentries Instructor Certification](#)**

PUBLICATIONS

- 2016 Erika S. Mesh, David M. Tolar, and J. Scott Hawker. "Exploring process improvement decisions to support a rapidly evolving developer base." In *Proceedings of the 38th International Conference on Software Engineering – Visions of 2025 and Beyond (V2025)*, 2016.
- 2015 Erika S. Mesh. "Supporting scientific SE process improvement." In *Doctoral Symposium of the 37th International Conference on Software Engineering*, 2015.
- 2014 Erika S. Mesh, Gabbie Burns, and J. Scott Hawker. "Leveraging expertise to support scientific software process improvement decisions." *Computing in Science & Engineering*, 16(3):28–34, 2014.
- 2013 Erika S. Mesh and J. Scott Hawker. "Scientific software process improvement decisions: A proposed research strategy." In *5th International Workshop on Software Engineering for Computational Science and Engineering*, 2013.

PRESENTATIONS, PANELS, & POSTERS

Speaker

- 2022 **"Strategies for Creating Productive, Healthy Student Teams,"** *Game Developers Conference 2022: Educators Summit*
- 2018 "What guides us [as women in computing]?", *Invited speaker. RIT Women in Computing: WiConnects, March 2018*

Panels

- 2013 "The Many Paths of Computing Careers", *New York Celebration of Women in Computing (NYCWIC)*, April 2013
- 2013 "Graduate Education", *New York Celebration of Women in Computing (NYCWIC)*, April 2013

Posters

- 2015 "Supporting Scientific SE Process Improvement", *Doctoral Symposium of the 37th International Conference on Software Engineering (ICSE)*, May 2015
- 2014 "Why do scientists developing software adopt SE best practices?", *CRA-W Graduate Cohort Workshop (CRA-W Grad Cohort)*, April 2014
- 2013 "Decision Support for Scientific Software Process Improvement", *New York Celebration of Women in Computing (NYCWIC)*, April 2013

RELATED EXPERIENCE

- 2012 SE Process Consultant
Private client with sites in multiple U.S. cities, France, Poland, and India
 - Assisted with SE process assessment of multiple business units worldwide via interviews and review of process documentation and work products.
 - *Related skills: CMMi, Agile methodologies, Domain and requirements analysis*
- 2011-13 Graduate Assistant
*Laboratory for Environmental Computing and Decision Making
Rochester Institute of Technology, Rochester, NY*
 - Developed a web-based freight transportation cost and environmental impact analysis tool (WebGIFT).
 - Mentored and supervised undergraduate research assistants.
 - Coordinated with external stakeholders and contractors.
 - *Related skills: C#, .NET, VisualStudio, Git, ArcGIS, Windows*
- 2007-11 Sr. Software Engineer
PAETEC, Rochester, NY
 - Senior engineer on a team providing production support and new development for multiple in-house sales support applications.
 - Worked routinely with other teams within IT and numerous business stakeholders including sales, account development, and product marketing.
 - *Related skills: Java, Javascript, JSON, SOA, XML, Oracle, PL/SQL, SVN, Mercurial, JIRA, Linux*
- 2002-07 Sr. Software Engineer
Harris Corporation, Rochester, NY
 - Requirements analysis, project planning, system design, development, integration, and test for multiple embedded software-defined radio waveform communication applications.
 - Technical contact for subcontractors, traveled to provide technical training and support and helped to integrate with external customer frameworks.
 - Training coordinator for the successful CMM Level 3 assessment of a team of 50+ engineers.
 - *Related skills: Embedded systems, C++, SVN, PVCS, Corba, CMM, *NIX*
- 1998- 2001 Software Engineering Co-ops
Miscellaneous 6+ month positions
 - Speech & Language Processing, BBN Technologies, Cambridge, MA
 - VivaScope controls and calibration software, Lucid, Inc., Rochester, NY
 - Data Cycle System (DCS) for the Stratospheric Observatory for Infrared Astronomy (SOFIA), Chester F. Carlson Center for Imaging Science, RIT, Rochester, NY
 - Controls programmer, Gleason Works, Rochester, NY