Amy Shannon Cook

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ACADEMIC APPOINTMENTS

Assistant Professor, Computer Science, University of Memphis   2019 - present

EDUCATION

Carnegie Mellon University   May 2019
PhD. in Human Computer Interaction

Carnegie Mellon University   May 2018
M.S. in Human Computer Interaction

Emory University   May 2014
B.S. in Computer Science and Mathematics, with Honors

EXTERNAL SUPPORT

NIH SEPA   2023-2028
The Memphis STEMM Ecosystem Scientists Communicating Research to Students (MemSCoReS) Program
- $1,300,000 award to St. Jude; $400,000 sub-award to University of Memphis
- PI: Kate Ayers (St. Jude); Co-PIs: Jaime Sable, Amy Cook

IES Development and Innovation   2022-2025
iCODE: Investigating and Scaffolding Students' Code Comprehension Processes to Improve Learning, Engagement, and Retention
- $2,000,000
- PI: Vasile Rus; Co-PIs: Matt Bernacki (Univ. of North Carolina), Amy Cook, Pani Kendeou (Univ. of Minnesota), Andrew Tawfik

NSF CyberCorps   2022-2025
CyberCorps Scholarship for Service Program
- $2,700,000
- PI: Kan Yang; Co-PIs: Amy Cook, Dipankar Dasgupta, Myounggyu Won

NSF IUSE   2021-2024
Improving the Quality of TA Feedback to Undergraduate Students in Intro CS Courses
- $300,000
- **PI: Amy Cook**; Co-PIs: Vinhthuy Phan, Alistair Windsor

FELLOWSHIPS AND AWARDS

Awards, University of Memphis

Research Leadership Development Program nominee	2023
NSF Aspired Work-Life Integrate Grant, PI	2023
Community of Research Scholars Award, co-PI	2023
Early Career Research Award	2022
Community of Research Scholars Award, co-PI	2021

Graduate Fellowships

Graduate Teaching Fellow: Eberly Center for Teaching Excellence & Innovation	2018
Program for Interdisciplinary Education Research (PIER) Fellow	2015 – 2019
NSF Graduate Research Fellowship Program: Honorable Mention	2015
ARCS Foundation Scholarship: Cohon Award, Pittsburgh Chapter	2014

PEER-REVIEWED PUBLICATIONS
Students' names are underlined.

Full Papers

[1]   Alina Zaman, **Amy Cook**, Vinhthuy Phan, Alistair Windsor. 2023. A Practical Strategy for Training Graduate CS Teaching Assistants to Provide Effective Feedback. In Proceedings of the 28th ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '23). Association for Computing Machinery, New York, NY, USA, 285–291. https://doi.org/10.1145/3587102.3588776

[2]   Jin Yang. Ruoxu Wang. **Amy Cook**. Rhema Fuller. 2023. *Gaming during the COVID-19 Pandemic: Examining its Effect on Loneliness & Motivation, Playing and Gratification Differences between Competitive and Recreational Gamers.* Telematics and Informatics Reports, Volume 11, https://doi.org/10.1016/j.teler.2023.100093

[3]   **Amy Cook**, Vinhthuy Phan, and Alistair Windsor. 2022. Improving TA Feedback on In Class Coding Assignments for Introductory Computer Science. In Proceedings of the 27th ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '22). Association for Computing Machinery, New York, NY, USA, 421–427. https://doi.org/10.1145/3502718.3524746

[4]   **Amy Cook**, Alina Zaman, Eric Hicks, Kriangsiri Malasri and Vinhthuy Phan. 2022. Try That Again! How a second attempt on in-class coding problems benefits students in CS1. In Proceedings of the 53rd ACM Technical Symposium on Computer Science Education (SIGCSE '22). Association for Computing Machinery, New York, NY, USA, 509–515. https://doi.org/10.1145/3478431.3499362

[5]   Eric Hicks, **Amy Cook**, Kriangsiri Malasri, Alina Zaman, and Vinhthuy Phan. 2022. Keep It Relevant! Using In-class Exercises to Predict Weekly Performance in CS1. In Proceedings of the 53rd ACM Technical Symposium on Computer Science Education (SIGCSE '22). Association for Computing Machinery, New York, NY, USA, 154-160. https://doi.org/10.1145/3478431.3499357

[6]   Alina Striner, Andrew M. Webb, Jessica Hammer, and **Amy Cook**. 2021. Mapping Design Spaces for Audience Participation in Game Live Streaming. In Proceedings of

the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21). Association for Computing Machinery, New York, NY, USA, Article 329, 1–15. https://doi.org/10.1145/3411764.3445511

[7]   **Amy Cook**, Steven Dow, and Jessica Hammer. 2020. Designing Interactive Scaffolds to Encourage Reflection on Peer Feedback. In Proceedings of the 2020 ACM Designing Interactive Systems Conference (DIS '20). Association for Computing Machinery, New York, NY, USA, 1143–1153. https://doi.org/10.1145/3357236.3395480

[8]   Joseph Seering, Ray Mayol, Erik Harpstead, Tianying Chen, **Amy Cook**, and Jessica Hammer. 2019. Peer Feedback Processes in the Game Industry. In Proceedings of the Annual Symposium on Computer-Human Interaction in Play (CHI PLAY '19). Association for Computing Machinery, New York, NY, USA, 427–438. https://doi.org/10.1145/3311350.3347176

[9]   **Amy Cook**, Jessica Hammer, Salma Elsayed-Ali, and Steven Dow. 2019. How Guiding Questions Facilitate Feedback Exchange in Project-Based Learning. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19). Association for Computing Machinery, New York, NY, USA, Paper 138, 1–12. https://doi.org/10.1145/3290605.3300368

[10]   Jessica Hammer and **Amy Cook**. 2018. EOTA: A Method for Improving Peer Feedback in the Game Design Classroom. International Academic Conference on Meaningful Play (*Meaningful Play '18)*.

[11]   **Amy Cook**, Steven P. Dow, and Jessica Hammer. 2017. Towards Designing Technology for Classroom Role-Play. In Proceedings of the Annual Symposium on Computer-Human Interaction in Play (CHI PLAY '17). Association for Computing Machinery, New York, NY, USA, 241–251. https://doi.org/10.1145/3116595.3116632

[12]   **Amy Shannon**, Alex Sciuto, Danielle Hu, Steven P. Dow, and Jessica Hammer. 2017. Better Organization or a Source of Distraction? Introducing Digital Peer Feedback to a Paper-Based Classroom. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17). Association for Computing Machinery, New York, NY, USA, 5545–5555. https://doi.org/10.1145/3025453.3025564

[13]   **Amy Shannon**, Jessica Hammer, Hassler Thurston, Natalie Diehl, and Steven Dow. 2016. PeerPresents: A Web-Based System for In-Class Peer Feedback during Student Presentations. In Proceedings of the 2016 ACM Conference on Designing Interactive Systems (DIS '16). Association for Computing Machinery, New York, NY, USA, 447–458. https://doi.org/10.1145/2901790.2901816

[14]   **Amy Shannon**, Valerie Summet. 2015. Live-Coding in Introductory Computer Science Courses. *Journal of the Consortium for Computing Sciences in Colleges*. 31, 2 (December 2015), 158-164.

[15]   **Amy Shannon**, Acey Boyce, Chitra Gadwal, Tiffany Barnes. 2013. Effective Practices in Game Tutorial Systems. In Proceedings of the 8th International Conference on the Foundations of Digital Games (FDG '13), 338-345. **Best Paper Award Nominee**. http://www.fdg2013.org/program/papers.html

Posters and Games

[1]   <u>Murshida Mouree</u> and **Amy Cook**. MapBuilders: An Educational Data Structures Game. Foundations of Digital Games '21. Game.

[2]   <u>Alina Zaman</u>, Vinhthuy Phan, **Amy Cook**. Enabling In-Class Peer Feedback on Introductory Computer Science Coding Exercises. SIGCSE '22. Poster.

TEACHING

University of Memphis Computer Science Department
- Human Computer Interaction, graduate (Spring: 2020, 2021, 2023, 2024)
- Human Computer Interaction, undergraduate (Fall: 2022, 2023, 2024)
- Capstone, undergraduate (Fall 2020, Fall 2022, Spring 2023, Fall 2023, Spring 2024)
- Computing for All, undergraduate (Fall 2019)

Carnegie Mellon University Human Computer Interaction Institute
- Head Teaching Assistant, Game Design for Crowd & Cloud (Fall 2017)
- Curriculum Developer, Game Design for Crowd & Cloud (Summer 2017)
- Teaching Assistant, User Centered Research & Evaluation (Fall 2016)

Carnegie Mellon University Eberly Center
- Graduate Teaching Fellow (2018-19)
- Future Faculty Program (2017-18)

GGJ Next
- Online Curriculum Developer (2017)

MENTORSHIP

PhD Students
- Brodrick Stigall: expected Fall 2024
- Cong Guo: expected Fall 2024
- Murshida Mouree: Spring 2021-present
- Alina Zaman: Spring 2020 – present; proposing Summer 2024

Master's Students
- Jill Johnson: graduated Fall 2022
- Andrew Edmiston: graduated Spring 2021
- Austin Smith: graduated Fall 2020
- David Rosenberg: graduated Spring 2020

Undergraduate Student Research Assistants
- Matthew Hosier: 2023
- Julio Barajas: 2023
- Tierney Jackson: 2023
- Liz Spitnaz: 2021-2023
- Jill Troncone: 2021

High School Student Summer Researchers
- Erica Ormseth: 2023
- Mallory Mills: 2021

LECTURES & PRESENTATIONS

Invited Speaker

Institute for Intelligent Systems, Lightning Research Talks, Memphis   2024
Artificial Intelligence Research Exchange, Universitat Autònoma de Barcelona   2024
PhD Student Teaching Interest Group, Carnegie Mellon University   2020
Southeastern Travel Counselor Alliance Conference   (canceled, COVID-19)

Guest Lectures

Carnegie Mellon University, Pittsburgh, PA
- In *Educational Game Design,* "Giving Effective Peer Feedback", 2019
- In *Building Virtual Worlds*, "Peer Feedback on Game Prototypes", 2017, 2018

Presentations

Assoc. for Education in Journalism and Mass Communication Conference   2023
Paper*: Mobile games going VR: How do game mode, brand familiarity, and game skill level influence game engagement?*

SIGCSE, Minneapolis, MN   2019
NSF Showcase: Scaling Project-Based STEM Learning through Novel Interactive Systems for In-Class Peer Feedback

Meaningful Play, East Landsing, MI   2016
Roundtable: Metaphor and Transformational Game Design

SERVICE

Professional Service

NSF Panel Reviewer: 2021
Track co-Chair, Foundations of Digital Games conference: 2021
Reviewer for:
- Transactions on Computer-Human Interaction (TOCHI): 2022
- Transactions on Computing Education (TOCE): 2020, 2024
- Innovation and Technology in Computer Science Education conference (ITiCSE): 2020, 2021
- Symposium on Computer Human Interaction in Games (CHI Play): 2018 – 2019
- Computers & Education: 2018
- Conference on Computer Supported Cooperative Work and Social Computing (CSCW): 2017 – 2019, 2021
- Conference on Human Factors in Computing Systems (CHI): 2016 – 2017, 2019-2020

Department and University Service
University of Memphis
- College of Arts and Science Research Council member: 2024 – 2025
- University Research Council, Strategic Plan Committee member: 2022
- Men's Ultimate Frisbee faculty sponsor: 2022 - present

University of Memphis, Computer Science Department
- Undergraduate Curriculum Committee member: Fall 2019 – present
- Teaching Assistant Orientation coordinator: 2023 - present
- Women in Computing student organization, faculty sponsor: 2022 – present
- CS Department Chair Search Committee: Fall 2023
- Faculty Search Committee: 2022-2023