

Nancy N. Blackburn, MS, MEAE

Curriculum Vitæ, January 2024
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Research Gate: [researchgate.net/profile/Nancy-Blackburn](https://www.researchgate.net/profile/Nancy-Blackburn)

ACADEMIC EXPERIENCE

- Associate Instructor, Division of Games, University of Utah** 2021–present
Co-created new course: *EAE 4900: Psychology of Games*.
Overhauled curriculum: *EAE 6330: Game Engineering III*.
- Graduate Research Assistant, Kahlert School of Computing, University of Utah** 2019–present
Developing novel game design tools for enhancing the impact of serious game objectives and their outcomes; improving security and privacy for end-users.
- Technical Specialist, Center for High Performance Computing, University of Utah** 2004–2007
- Undergraduate Research Assistant**
Department of Mathematics, University of Tennessee in Knoxville Summer 2006
Department of Mathematics, University of Utah Spring 2003, Summer 2005–Spring 2006

PEER-REVIEWED PUBLICATIONS

Refereed Conference Articles

- Blackburn, Nancy N, M Gardone, and Daniel S Brown.** 2023. “Player-Centric Procedural Content Generation: Enhancing Runtime Customization by Integrating Real-Time Player Feedback.” CHI PLAY Companion ’23, October 10–13, 2023, Stratford, ON, Canada.
- Clemens, Michael, **Nancy N. Blackburn**, Rushit Sanghrajka, Monthir Ali, Michael Gardone, Shilpa Thomas, Hunter Finney, and Rogelio Cardona-Rivera. 2022. “A Case-Based Reasoning Approach to Plugin Parameter Selection in Vocal Audio Production.” In , 350–64.
- Blackburn, Nancy N.,** and Rogelio E. Cardona-Rivera. 2021. “OGrES Welcome! Toward a Systematic Theory for Serious Game Design.” In Extended Abstracts of the 2021 Annual Symposium on Computer-Human Interaction in Play, 242–48. Virtual Event Austria: ACM.

PRESENTATIONS OF SCHOLARLY WORK

CHI Play 2023:

Player-Centric Procedural Content Generation 2023

CHI Play 2021:

OGrES Welcome! Toward a Systematic Theory for Serious Game Design 2021

National Conference for Undergraduate Women in Mathematics:

Wild Population Augmentation from Reserve Populations 2006

A Mathematical Model of Tri-Trophic Interactions of Predator, Prey/Herbivore, Producer 2005

National Conference for Undergraduates:

HPC Genetic Algorithm for Multiple Sequence Alignment (Poster) 2004

Intermountain Junior Science & Humanities Symposium:

Measuring the breakdown of aspartame into its components utilizing HPLC chromatography (Poster) 2002

GRANTS, FELLOWSHIPS, AND SCHOLARSHIPS

- School of Computing Fellowship, University of Utah:** \$17,500 2019
- Graduate Travel Award, NSF Workshop for Game-based Assessment:** \$1,000 2019
- Scholarship for Women in the Sciences, Intel Corporation:** \$600 2006

C. Bryant and Clara C. Copley Scholarship for Excellence in Mathematics <i>Department of Mathematics, University of Utah: \$600</i>	2006
Dean's Scholarship, College of Science, University of Utah: \$1,500	2005
C. Bryant and Clara C. Copley Scholarship for Excellence in Mathematics: \$600 <i>Department of Mathematics, University of Utah</i>	2003
Honors at Entrance Scholarship, College of Science, University of Utah: 4 Years Tuition	2002
ACCESS Scholarship for Women in Science, College of Science, University of Utah: \$3,000	2002
Henry B. Eyring Chemistry Scholar, Department of Chemistry, University of Utah: Full Program Tuition	2001

GAMES PUBLISHED (CREDITED)

Technical Game Designer , PlayWrite Studios, LLC: <i>Logout</i> (Steam); Intel University Showcase Finalist	2018
Unity Developer , Waterford Institute: <i>Waterford Early Learning</i> (iPad/WebGL); National School Rollout	2015
Team Lead/Original Concept , Indie: <i>Schrodinger's Uncertain Butterfly</i> (PC)	2014
Judges Choice, Global Game Jam	
Gameplay Programmer , Indie: <i>Armadillo Smash N' Roll</i> (Windows 8 Store); Editor's Pick Award	2013

NON-ACADEMIC WORK EXPERIENCE

Unity Developer (Gameplay Programmer) , Waterford Institute	Mar 2015–Jan 2016
Gameplay Engineer Intern , Electronic Arts, Inc. / Maxis	May 2014–Oct 2014
Game Engineer Intern , Rockwell Collins (now Collins Aerospace)	Feb 2014–May 2014
Software Developer , BaseCamp Franchising	Jan 2013-Feb 2014, May 2017-Jul 2019

SERVICE TO PROFESSION

Reviewer

<i>CHI conference on Human Factors in Computing Systems: Serious Games, Gamification</i>	2023
<i>IEEE Conference on Games (CoG): Game AI, Serious/Applied Games</i>	2023
<i>Foundations of Digital Games (FDG): Game AI Track</i>	2021

PROFESSIONAL MEMBERSHIP

<i>ACM (Association for Computing Machinery)</i> , member	2021-present
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AFFILIATIONS

Pi Mu Epsilon, Mathematics Honor Society (Top 10% of math department)	2003
Golden Key International Honor Society (Top 15% of University for Bachelor's, Master's, & Doctorate)	2002

TEACHING EXPERIENCE

Associate Instructor , <i>Division of Games, University of Utah</i>	Spring 2021-present
Instructor of record : EAE 4900/EAE 6900: Psychology of Games	Spring 2021, Spring 2023, Spring 2024
Co-created the course.	
Increased enrollment cap twice to better meet student interest (Spring 2021, Spring 2024).	
Added a graduate student component Spring 2023, Spring 2024.	
Oversaw TA's tasks ensuring new course content and assignments were created and graded in a timely and efficient manner.	
Instructor of record : EAE 6330: Game Engineering III	Spring 2022, Fall 2022, Spring 2024
Overhauled course with brand new instructional design.	
100% positive feedback Spring 2022	

Increased enrollment cap Fall 2022

Graduate Teaching Assistant, *Division of Games, University of Utah*

EAE 6300: C++ for Game Engineers Fall 2023

Mentored students with coding questions, graded assignments, assisted with maintaining online course data.

EAE 6050: Game Systems Design Fall 2023

Assisted with grading.

EAE 6320: Game Engineering II Fall 2021

Mentored students with coding questions.

EAE 6330: Game Engineering III Fall 2020

Mentored students with coding questions and graded assignments.

Associate Instructor, *Youth Education Program, University of Utah* Summer 2020

Instructor of record: Game Design and Programming Camps

Designed and taught five variations of the course tailored to three different age groups between 7-14.

Guest Lectures

Intelligent Educational Games: EAE 6610: Artificial Intelligence for Games Spring 2022

Formal Game Design Frameworks: EAE 6330: Game Engineering III Fall 2020