

Curriculum Vitae

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Mike Treanor

Computer Science
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Education

Ph.D. Computer Science, University of California at Santa Cruz, 2013
Thesis: *Investigating Procedural Expression and Interpretation in Videogames*
Advisor: Michael Mateas

M.S. Computer Science, University of California, Santa Cruz, 2011
Thesis: *AI-Based Gamed Design and Prom Week*
Advisor: Michael Mateas

M.F.A. Digital Art and New Media, University of California at Santa Cruz, 2008
Thesis: *Reflect - An Art Game*
Advisor: Michael Mateas

B.A. Computer Science, University of California at Santa Cruz, 2006
Concentration in Computer Game Design

Professional Employment

Associate Professor, American University, Washington DC, September 2019 – Present
Department of Computer Science and Game Lab

Assistant Professor, American University, Washington DC, August 2013 – August 2019
Department of Computer Science and Game Lab

Graduate Student Researcher, University of California at Santa Cruz, 2010 - 2013
IMMERSE: simulation technology for a military cultural training simulator
Knight Foundation News Challenge: developed tools for creating editorial games

Teaching Assistant, University of California at Santa Cruz, 2006 - 2010
11 courses in Film/Television, Music, Digital Media and Art History.

Journal Articles

1. Josh McCoy, **Mike Treanor**, Ben Samuel, Aaron A. Reed, Michael Mateas, and Noah Wardrip-Fruin. *Social Story Worlds with Comme il Faut*, IEEE Transactions on Computational Intelligence and AI in Games, vol. 6, no. 2, 2014.
2. Gillian Smith, Jim Whitehead, Michael Mateas, **Mike Treanor**, Jameka March, Mee Cha. *Launchpad: A Rhythm-Based Level Generator for 2D Platformers*. IEEE Transactions on Computational Intelligence and AI in Games, 2011.

Peer-Reviewed Conference Proceedings

1. **Mike Treanor**, Mark J. Nelson. *Order-fulfillment Games: An Analysis of Games About Serving Customers*. In Proceedings for The Foundations of Digital Games Conference (FDG 2019). August 2019.
2. Ben Samuel, Aaron Reed, Emily Short, Samantha Heck, Barrie Robison, Landon Wright, Terence Soule, **Mike Treanor**, Joshua McCoy, Anne Sullivan, Alireza Shirvani, Edward Garcia, Rachelyn Farrell, Stephen Ware, Katherine Compton. *Playable Experiences at AIIDE 2018*. In the Proceedings of the AI and Interactive Digital Entertainment Conference (AIIDE 2018). November 2018.
3. **Mike Treanor**, Christopher W. Totten, Joshua McCoy, G. Tanner Jackson. *Merging Education, Assessment, and Entertainment in Math Games: A Case Study of Function Force*. To appear in the Proceedings of the International Academic Conference on Meaningful Play. October 2018.
4. Jennifer Klafehn, Patricia Inglese, **Mike Treanor**, Joshua McCoy. *Walking a Mile in Simulated Shoes: Development of an Assessment of Perspective Taking*. In the Proceedings of the MODSIM World Conference. 2018.
5. **Mike Treanor**, Nicholas Warren, Mason Reed, Adam M. Smith, Pablo Ortiz, Laurel Carney, Loren Sherman, Elizabeth Carré, Nadya Vivatvisha, D. Fox Harrell, Paola Mardo, Andrew Gordon, Joris Dormans, Barrie Robison, Spencer Gomez, Samantha Heck, Landon Wright, Terence Soule. *Playable Experiences at AIIDE 2017*. In the Proceedings of the AI and Interactive Digital Entertainment Conference (AIIDE 2017). October 2017.
6. **Mike Treanor**, Josh McCoy, Anne Sullivan. *A Framework for Playable Social Dialogue*. In the Proceedings of the AI and Interactive Digital Entertainment Conference (AIIDE 2016). October 2016.
7. **Mike Treanor**. *Finding Meaning in Abstract Games: A Deep Reading of Sage Solitaire*. In the Proceedings of 1st International Joint Conference of DiGRA and FDG. August 2016.
8. Lindsay Grace, **Mike Treanor**, Chris Totten, Josh McCoy. *A Case Study in Newgame Creation: Why Game Designers and Journalists are Still Learning to Work Together*. In the proceedings of the International Communication Association Annual Conference (ICA 2016). June 2016.
9. **Mike Treanor**, Alex Zook, Mirjam P Eladhari, Julian Togelius, Gillian Smith, Michael Cook, Tommy Thompson, Brian Magerko, John Levine and Adam Smith. *AI-based Game Design Patterns*. In the Proceedings of the Foundations of Digital Games Conference (FDG 2015). June 2015.
10. **Mike Treanor**, Josh McCoy, Anne Sullivan. *Social Play in Non-Player Character Dialog*. Social Believability in Games Workshop. In the Proceedings of the AI and Interactive Digital Entertainment (AIIDE 2015). October 2015.

11. **Mike Treanor**, Michael Mateas. *Understanding Representation in Playable Simulations*. The Foundations of Digital Games Conference (FDG 2014). April 2014.
12. Ben Samuel, Josh McCoy, **Mike Treanor**, Aaron Reed, Noah Wardrip-Fruin and Michael Mateas. *Introducing Story Sampling: A New Approach to Evaluating and Authoring Interactive Narrative*. In the Proceedings of the Foundations of Digital Games (FDG 2014). April 2014.
13. Dan Shapiro, Josh McCoy, April Grow, Ben Samuel, Andrew Stern, Reid Swanson, **Mike Treanor**, Michael Mateas, *Creating Playable Social Experiences through Whole-body Interaction with Virtual Characters*. In the Proceedings of the AI and Interactive Digital Entertainment (AIIDE 2013), Boston, MA. October 2013.
14. **Mike Treanor**, Michael Mateas. *An Account of Proceduralist Meaning*. In the proceedings of the Conference of the Digital Games Research Association (DIGRA). August 2013.
15. Josh McCoy, **Mike Treanor**, Ben Samuel, Aaron Reed, Noah Wardrip-Fruin and Michael Mateas, *Prom Week: Designing past the game/story dilemma*. In the Proceedings of the Foundations of Digital Games Conference (FDG 2013), Crete, Greece. May 2013.
16. **Mike Treanor**, Bobby Schweizer, Ian Bogost, Michael Mateas. *The Micro-Rhetorics of Game-O-Matic*. In Proceedings of Foundations of Digital Games (FDG 2012), Raleigh, NC, USA. 2012.
17. **Mike Treanor**, Bryan Blackford, Michael Mateas, Ian Bogost. *Game-O-Matic: Generating Videogames that Represent Ideas*. In the Proceedings of Procedural Content Generation Workshop 2012. Raleigh, NC, USA. May 2012.
18. Josh McCoy, **Mike Treanor**, Ben Samuel, Noah Wardrip-Fruin, Michael Mateas, *Comme il Faut: A System for Authoring Playable Social Models*. In the Proceedings of the 7th AI and Interactive Digital Entertainment (AIIDE 2011), Stanford, CA, October 2011.
19. **Mike Treanor**, Michael Mateas. *BurgerTime: A Proceduralist Investigation*. Conference of the Digital Games Research Association (DIGRA. 2011).
20. **Mike Treanor**, Bobby Schweizer, Ian Bogost, Michael Mateas. *Proceduralist Readings: How to Find Meaning in Games with Graphical Logics*. In Proceedings of Foundations of Digital Games (FDG 2011), Bordeaux, France, 6/28-7/1 2011.
21. Josh McCoy, **Mike Treanor**, Ben Samuel, Brandon Tearse, Michael Mateas, Noah Wardrip-Fruin. *Authoring Game-based Interactive Narrative using Social Games and Comme il Faut*. The 4th International Conference & Festival of the Electronic Literature Organization (ELO_AI: Archive & Innovate). Providence, Rhode Island. 2010.
22. **Mike Treanor**, Michael Mateas, Noah Wardrip-Fruin. *Kaboom! is a Many-Splendored Thing: An interpretation and design methodology for message-driven games using graphical logics*. In Proceedings of Foundations of Digital Games (FDG 2010), Monterey, California, USA, 19--21 June 2010.
23. Josh McCoy, **Mike Treanor**, Ben Samuel, Brandon Tearse, Michael Mateas, Noah Wardrip-Fruin. *Comme il Faut 2: A fully realized model for socially-oriented gameplay*. Proceedings of Foundations of Digital Games (FDG 2010) Intelligent Narrative Technologies III Workshop (INT3). Monterey, California, USA. June 2010.
24. **Mike Treanor**, Michael Mateas. *Newsgames: Procedural Rhetoric meets Political Cartoons*. Conference of the Digital Games Research Association (DiGRA). September 2009.
25. Gillian Smith, **Mike Treanor**, Jim Whitehead, Michael Mateas. *Rhythm-Based Level Generation for 2D Platformers*. Proceedings of the Int'l Conference on the Foundations of Digital Games (FDG 2009), Orlando, FL, April 2009.

Book Chapters

1. Ben Samuel, Dylan Lederle-Ensign, **Mike Treanor**, Noah Wardrip-Fruin, Josh McCoy, Aaron Reed, and Michael Mateas. *Playing the Worlds of Prom Week*. Narrative Theory, Literature and New Media. Routledge. 2016.

Technical Reports

1. Michael Cook, Mirjam Eladhari, Andy Nealen, **Mike Treanor**, Eddy Boxerman, Alex Jaffe, Paul Sottosanti, Steve Swink. *PCG-Based Game Design Patterns*. arXiv:1610.03138. October 2016.
2. **Mike Treanor**, Michael Cook, Mirjam Eladhari, John Levine, Brian Magerko, Adam Smith, Gillian Smith, Tommy Thompson, Julian Togelius, Alex Zook. *AI-Based Game Design*. In Report of Dagstuhl Seminar 15051, “Artificial and Computational Intelligence in Games: Integration”. Dagstuhl Research Online Publication Server, DOI: 10.420/DagRep.5.1.207, 2015.
3. Alex Champandard, Mirjam Eladhari, Ian Horswill, Brian Magerko, McCoy, Pieter Spronck, **Mike Treanor**, Michael Young, Jichen Zhu. *Believable Characters*. In Report of Dagstuhl Seminar 15051, “Artificial and Computational Intelligence in Games: Integration”. Dagstuhl Research Online Publication Server, DOI: 10.420/DagRep.5.1.207, 2015.

Peer Reviewed Demonstrations and Posters

1. Joshua McCoy, **Mike Treanor**, Anne Sullivan, Ben Samuel, Aaron Reed. *Ensemble Design Tool*. In Proceedings of the Experimental AI in Games Workshop (EXAG) co-located with Artificial Intelligence in Interactive Digital Entertainment (AIIDE 2015). October 2015. [demo]
2. **Mike Treanor**. Playable Experiences Panel. *Game-O-Matic*, AI and Interactive Digital Entertainment (AIIDE'13), Boston, MA, 2013. [demo]
3. Josh McCoy, **Mike Treanor**, Ben Samuel, Aaron Reed, Michael Mateas, and Noah Wardrip-Fruin. *Prom Week*. Foundations of Digital Games 2012. [demo]
4. Josh McCoy, **Mike Treanor**. *Prom Week*. Inventing the Future of Games (IFoG), April 15th, 2011. [poster, demo]
5. Josh McCoy, **Mike Treanor**, Ben Samuel, Brandon Tearse, Michael Mateas, Noah Wardrip-Fruin. *The Prom: An Example of Socially-oriented Gameplay*. AI and Interactive Digital Entertainment. October 11-13, 2010. [demo]
6. Josh McCoy, **Mike Treanor**, Ben Samuel, Brandon Tearse, Michael Mateas, and Noah Wardrip-Fruin. *The Prom*. Foundations of Digital Games, June 19-21, 2010. [demo]

Other Written Work

1. Bron Treanor and **Mike Treanor**. *Thoughts on Desert Golfing*. Diodata Literary Magazine. John Cabot University. Rome, Italy. June 2017.

Media Exposure

- Greg Toppo. *White House 'game jam' lures top video game developers*. **USA Today**. Sept. 12, 2014. My game, Function Force, was the featured game. [\[link\]](#)
- Roland Li. *Making Money as a Zelda Speedrunner*. **Polygon**. Jan. 9, 2014. Interviewed. [\[link\]](#)
- Douglas Heaven. *ButtonMasher: DIY video game tools put you in control*. **New Scientist**. Aug. 28, 2013. Interviewed. [\[link\]](#)
- Brandon Sheffield. *AI programmers can be artists!*. **Gamasutra**. March 5th, 2012. [\[link\]](#)

- *The Future of Videogame AI*. **Edge Magazine #242**. July 2012. Interview. Print.
- Tom Senior. *The Game-o-matic game making experiment*. **PC Gamer**. April 7, 2013. [\[link\]](#)
- Prom Week
 - Keith Stuart. *Video games where people matter? The strange future of emotional AI*. **The Guardian**. October 12th, 2016. [\[link\]](#)
 - *Prom Week: How A Game Can Simulate Real-World Relationships*. **Game Career Guide.com**. August 30th, 2012. [\[link\]](#)
 - Sheila Eldred. *PROM WEEK: THE NEXT ANGRY BIRDS?* **Discovery News**. February 14th, 2012. [\[link\]](#)
 - Steve Kolowich. *Model Romance*. **Inside Higher Ed**. February 14, 2012. [\[link\]](#)
 - Greg Costikyan. *Prom Week: Playin da Queen Bee*. **Play This Thing**. February 12th, 2012.
 - Leigh Alexander. *Road to the IGF: Expressive Intelligence Studio's Prom Week* **Gamasutra**. January 31st, 2012. [\[link\]](#)
 - Nathan Meunier. *8 Awesome Indie Games*. **Gamespy**. January 30th, 2012. [\[link\]](#)
 - Alec Meer. *IGF Factor 2012: Prom Week*. **Rock, Paper, Shotgun**. January 30th, 2012. [\[link\]](#)
 - Craig Pearson. *Impressions: Prom Week*. **Rock, Paper, Shotgun**. February 16th, 2012. [\[link\]](#)
 - Nick DeSantis. *Students' Video Game Tests New Artificial-Intelligence Engine — at the Prom*. **The Chronicle of Higher Education**. January 20th, 2012. [\[link\]](#)
 - Rob Manuel. *Always Bet on Indie — Our Predictions for the IGF 2012 Awards*. **g4tv**, January 19th, 2012. [\[link\]](#)
 - Daniel Nye Griffiths. *Indie Games Finalists Announced – Lessons for the Big Players?* **Forbes**, January 11th, 2012. [\[link\]](#)
 - Tom Curtis. *GDC 2012 details new AI Summit highlights*. **Gamasutra**. January 5th, 2012. [\[link\]](#)
 - Eric Caoili. *Prom Week: Facade Follow-up Social Game*. **Game Set Watch**. October 20th, 2011. [\[link\]](#)
 - AJ Glasser. *Academic Project Prom Week Points to Problems with Truly Social Social Games*. **Inside Social Games**, April 18th, 2011. [\[link\]](#)
 - Christian Nutt. *Future Of Games: Driving Gameplay Innovation With Technology Research*. **Gamasutra**, April 15th 2011. [\[link\]](#)
 - Michael Thomsen. *The Era of Behaving Playfully*. **Gamasutra**, January 19th, 2011. [\[link\]](#)
- Kieron Gillen. *Feeling Randy: Rationalization*. **Rock, Paper, Shotgun**. August 24th, 2009. My game Rationalization was reviewed. [\[link\]](#)
- *Reflect*. **Gee Magazine**. Print. September 2008. Reflect had a full page feature. Germany.

Exhibitions, Honors and Fellowships

- *Reflect* was exhibited in the Half-Real: Hanover Project exhibition at the University of Central Lancashire. January 2016.
- *Delivery Drone* was exhibited at the Smithsonian American Art Museum Indie Arcade 2016.
- *Delivery Drone* was selected for exhibition at the Artscape Festival 2015.

- *Game-O-Matic* was a selection for the AI in Interactive Digital Entertainment Playable Experiences track. AIIDE 2013.
- *Prom Week* was a selection for the AI in Interactive Digital Entertainment Playable Experiences track. AIIDE 2013.
- *Prom Week* as a finalist in the IndieCade Festival 2012.
- *Prom Week* featured in the IndieCade 2012 E3 Showcase.
- *Prom Week* was a Main Competition Finalist in Technical Excellence, The 14th annual Independent Games Festival, 2012.
- *Prom Week* was chosen as AI Game Dev Editor's Choice for best AI in an independent game.
- *Prom Week* won the Intelligent Virtual Agents 2012 GALA demo and video festival.
- Florence French Fellowship, University of California, Santa Cruz. September 2007.
- Florence French Fellowship, University of California, Santa Cruz. September 2006.

Invited Activities

1. **Invited Participant.** Artificial and Computational Intelligence in Games: AI-Driven Game Design. Dagstuhl Seminar. Wadern, Germany. November 2017.
2. **Panel Moderator/Curator.** Playable Experiences at AIIDE 2017. AI in Interactive Digital Entertainment Conference. Snowbird, Utah. 2017.
3. **Keynote Speaker.** *Making NPCs Matter.* Non-Player Character and Social Believability Workshop. Foundations of Digital Games Conference. Cape Cod, MA. 2017.
4. **Invited Participant.** BIRS Computational Modeling in Games. Banff, AB, Canada. 2015.
5. **Panelist.** *Design Patterns in Games.* Design Patterns in Games Workshop. Foundations of Digital Games Conference. Monterey, CA. 2015.
6. **Panelist.** IGDA DC Speaker Series: Games, Festivals and Funding. Washington, DC. 2015.
7. **Invited Participant.** Artificial and Computational Intelligence in Games: Integration. Dagstuhl Seminar. Wadern, Germany. 2015.
8. **Invited Speaker.** *Game-O-Matic Postmortem.* What's next for procedural content? Symposium. Copenhagen, Denmark. 2014.
9. **Invited Participant.** The White House Educational Game Jam. Washington, DC. 2014.
10. **Panelist.** AI: The Undiscovered Country. Foundations of Digital Games Conference. Fort Lauderdale, FL. 2014.
11. **Panelist.** Playable Experiences Panel, *Game-O-Matic*, AI and Interactive Digital Entertainment (AIIDE'13), Boston, MA, 2013.
12. **Invited Speaker.** *AI for its own sake.* Turing Tantrums AI Developers Rant, AI Summit of the Game Developer's Conference (GDC 2012). San Francisco, CA. March 5-9, 2012.
13. **Invited Speaker.** With Josh McCoy, *Prom Week.* *Beyond Eliza: Constructing Socially Engaging AI*, AI Summit of the Game Developer's Conference (GDC 2012). San Francisco, CA. March 5-9, 2012.
14. **Invited Speaker.** With Josh McCoy, *Prom Week: Enabling Playable Social Models.* Game/AI Conference. Paris, France. June 23-24, 2011.
15. **Symposium.** With Michael Mateas. *The Rhetoric of Newsgaming.* Transliteracies New Reading Interfaces Group Symposium, Santa Barbara, CA, USA. May 12, 2007.

Grants and Funded Projects

- PI. “Function Force, an educational game involving the nature and use of mathematical functions”. Educational Testing Service Research Project. \$22,481. January 2017.
- PI. “Assessing Complex Constructs Using Extended Games”. Educational Testing Service Research Project. \$178,011. May 2015 – July 2018.

Advising / Mentorship

- Academic advisor for the Master of Arts in Game Design at American University from Fall 2014 to present.
- Postdoctoral Fellow mentorship for Anne Sullivan, Ph.D. August 2014 – July 2015.
- Thesis committee member for Margo Kelly. MS Computer Science. Graduated Summer 2015.
- Dissertation committee member for Theo Plothe. Ph.D. Communication. Fall 2015.

Teaching

American University:

- Fall 2013: CSC 589: Topics in Computer Science - AI and Media/Art Making
 - New course. Developed all course materials
- Spring 2014: CSC 280: Introduction to Computer Science
 - New course. Developed all course materials
- Spring 2014: CSC 589: Topics in Computer Science - Game Development
 - New course. Developed all course materials
- Fall 2014: GAME 601: Game Design and the Art Production Pipeline
 - New course. Developed all course materials
- Spring 2015: GAME 615: Game Development
 - New course. Developed all course materials
- Spring 2015: CSC 280: Introduction to Computer Science
- Fall 2015: CSC 280: Introduction to Computer Science
- Fall 2015: GAME 620: Games and Rhetoric
 - New course. Developed all course materials
- Spring 2016: GAME 620: Games and Rhetoric
- Spring 2016: CSC 589: Topics in Computer Science - Game Development
- Spring 2017: CSC 435: Web Programming
 - Developed all course materials
- Spring 2017: GAME 615: Game Development
- Fall 2017: GAME 625: Advanced Game Development
 - New course. Developed all course materials
- Fall 2017: GAME 601: Game Design and the Art Production Pipeline
- Spring 2018: CSC 589: Topics in Computer Science - Game Development
- Spring 2018: GAME 615: Game Development
- Fall 2018: GAME 601: Game Design and the Art Production Pipeline
- Spring 2019: GAME 615: Game Development
- Spring 2019: CSC 121: Creative Coding
 - Developed all course materials

John Cabot University:

- Summer 2016: CW/DMA 360 Creative Writing Workshop: Videogames

- New course. Developed all course materials
- Summer 2017: CW/DMA 360 Creative Writing Workshop: Videogames

University of California at Santa Cruz (as a teaching assistant):

- Fall 2006: Music 80x: Music of India
- Winter 2007: Film 20b: Television Culture and Society
- Spring 2007: Art 80v: Issues and Artists
- Fall 2007: Art 80f: Intro to Issues in Digital Art
- Winter 2008: Film 20b: Television Culture and Society
- Spring 2008: HAVC 80x: Ancient Greek Art
- Fall 2008: Film 120: Intro to Film Theory
- Winter 2009: HAVC 80h: Video Games as Vis Culture
- Spring 2009: Film 20a: The Film Experience
- Fall 2010: HAVC 80h: Video Games as Vis Culture
- Spring 2010: Film136b: History of Television

Service and Professional Development

Service to the Discipline

Conference Organization

- Playable Experiences Chair. AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE 2017)
- Doctoral Consortium Chair. The International Joint Conference of DiGRA and FDG (FDG/DiGRA 2016)

Conference Program Committees

- International Conference on the Foundations of Digital Games (FDG 2012)
- Workshop on Procedural Content Generation in Games (PCG 2012)
- IEEE Conference on Computational Intelligence and Games (CIG 2013)
- Digital Games Research Association Conference (DiGRA 2013)
- AAAI Conference on Artificial Intelligence (subreviewer) (AAAI 2014)
- IEEE Conference on Computational Intelligence and Games (CIG 2014)
- International Conference on the Foundations of Digital Games (FDG 2014)
- Artificial Intelligence in Interactive Digital Entertainment Conference (AIIDE 2014)
- International Conference on the Foundations of Digital Games (FDG 2015)
- AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE 2015)
- IEEE Conference on Computational Intelligence and Games (CIG 2016)
- AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE 2016)
- International Joint Conference of DiGRA and FDG (DiGRA/FDG 2016)
- Digital Games Research Association Conference (DiGRA 2017)
- Workshop on Tabletop Games (TG 2018)

- Digital Games Research Association Conference (DiGRA 2019)
- International Conference on the Foundations of Digital Games (FDG 2019)

Journal Reviewing

- IEEE Transactions on Computational Intelligence and Artificial Intelligence in Games (TCIAIG)

Game Festival Judge

- Indiecade 2013-2017
- Smithsonian American Art Museum (SAAM) Indie Arcade 2017

Service to American University

Hiring Committees

- 1 School of Communication tenure line
- 4 Computer Science tenure line
- 3 Computer Science full-time, non-tenure line
- 1 Art Department Game Artist in Residence
- 1 Director of Audio Technology

Program and Course Development

- Adapted CSC 121 “Creative Coding” to satisfy the Quantitative 2 requirement of the AUCORE.
- Adapted CSC 281 “Introduction to Computer Science II” to satisfy the Quantitative 2 requirement of the AUCORE.
- Created CSC 604 “Advanced Introduction to Coding for the Arts and Humanities”
- Created CSC 470/670 “Game Programming”
- I co-created two proposals for a Master of Science in Game Design in 2015 and 2016.
- I was a founding member of the Master of Arts in Game Design. This involved developing new courses, and working closely with the director to finalize the design of the program.

Other

- The “Arts Narrative” committee to ensure that a new Technology building would support the exhibition of student and faculty work.