

Yusuf Pisan

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EDUCATION

GradCert	2001	Educational Studies (Higher Education), Macquarie University
PhD	1998	Northwestern University, Evanston, IL Title: <i>An integrated architecture for engineering problem solving</i>
BS	1992	Computer Science, Northwestern University, Evanston, IL

RESEARCH INTERESTS

- Computer Science Education: How can we teach better, provide better feedback to learners, scaffold independent learning, understand common mental bugs, build automated and semi-automated systems to improve productivity;
- Video Games: Building more realistic and engaging non-player characters, providing novel user experiences, better graphics, better scalability, better interaction
- Artificial Intelligence: Systems that can explain their reasoning, answer what-if questions, learn from a few examples, be collaborators rather than blunt tools.

EMPLOYMENT HISTORY

Sep 2025 – present	Teaching Professor Computing and Software Systems University of Washington Bothell
Sep 2020 – Sep 2025	Associate Teaching Professor Computing and Software Systems University of Washington Bothell
Sep 2017 – Sep 2020	Senior Lecturer Computing and Software Systems University of Washington Bothell
Jan 2008 – Aug 2017	Associate Professor Director, Games Studio School of Software, University of Technology Sydney
Jun 2015 - Dec 2015	Visiting Professor , Harvey Mudd College (HMC)
May 2011 - Jun 2011	Visiting Professor , IT University of Copenhagen (ITU)
Jan 2007 - Dec 2007	Visiting Professor , Worcester Polytechnic Institute (WPI)
Jun 2003 – Jan 2008	Senior Lecturer Co-director of Creativity & Cognition Studios Department of Software Engineering, University of Technology Sydney
Jan 2003 – Jun 2003	Senior Lecturer , Computing Department, Macquarie University
Feb 2000 – Jan 2003	Lecturer , Computing Department, Macquarie University
Jul 1998 – Feb 2000	ARC Research Fellow , University of New South Wales
Sep 1992 – Jun 1998	Research Assistant , Northwestern University

AWARDS

1. Distinguished Teaching Award, University of Washington Bothell, 2023.
The Distinguished Teaching Award (DTA) is presented each year to a UW Bothell faculty member in recognition of teaching that richly exemplifies the high standards at the heart of the academic mission of the University of Washington Bothell.
2. UTS Learning and Teaching Award, University of Technology Sydney, 2006.
The UTS Vice-Chancellor's Learning and Teaching Awards and Citations recognise the importance of learning and teaching for both undergraduate and postgraduate students within the framework of the UTS model of global practice-oriented education.

Courses Taught at University of Washington Bothell

- BCORE 104 Games for Good (2024AU)
- CSS 132 Computer Programming for Engineers I (2017AU, 2018AU, 2019AU, 2020AU, 2021AU)
- CSS 133 Computer Programming for Engineers II (2018WI, 2019WI, 2020WI, 2021WI, 2022WI)
- CSS 142 Computer Programming I (2017AU, 2021AU)
- CSS 143 Computer Programming II (2024AU, 2025WI)
- CSS 342 Data Structures, Algorithms, and Discrete Mathematics I (2018SP, 2019AU, 2020AU, 2021AU, 2022AU, 2023WI, 2023SP, 2023AU)
- CSS 343 Data Structures, Algorithms, and Discrete Mathematics II (2018WI, 2018AU, 2019SP, 2019AU, 2020WI, 2021WI, 2022WI, 2023SP, 2023AU, 2024WI, 2025WI, 2025SP, 2025AUx2)
- CSS 382 Introduction to Artificial Intelligence (2020WI, 2020SU, 2021WI, 2021SP, 2022WI, 2023SP)
- CSS 385 Introduction to Game Development (2018SP, 2019SP, 2020SP, 2021SP, 2022AU, 2023SP, 2024SP, 2025SP)
- CSS 390 Special Topics: Game Development (2018AU)
- CSS 422 Hardware and Computer Organization (2023AU, 2024SP, 2024AU)
- CSS 430 Operating Systems (2019SP, 2020SP, 2021SP, 2023WI, 2024WI, 2025WI, 2025AU)
- CSS 599 Faculty Research Seminar (2024WI)

New Courses & Course Redesign

- CSS 132/133 Computer Programming for Engineers I/II. This course was introduced specifically to serve the needs of the EE students and focuses on C/C++. I developed and taught the course for the first five years. The current instructor continues to use my materials in teaching this course.
- CSS 342/343 Data Structures, Algorithms, and Discrete Mathematics I/II. In response to student requests to make these courses more relevant to technical interviews, I redesigned this course to include hands-on exercises with a focus on problem solving. Students continue to report these courses as critical in getting a job after graduation.
- CSS 382 Introduction to Artificial Intelligence. I proposed, developed and taught Introduction to Artificial Intelligence course. The course serves as a gateway to more advanced 400-level machine learning courses and is an elective course for the Data Science minor and as such is taken by students across multiple disciplines.
- CSS 385 Introduction to Game Development. Modified course structure based on ideas from upgrading and contract specification grading. Students choose how many projects they want to complete as well as which projects they want to complete to obtain the grade they are aiming at.
- CSS 430 Operating Systems. Changed textbook to a freely available one that has much better project support and homework framework with integrated testing. Started using xv6, Version 6 Unix, a re-implementation of the 1975 unix, so students can modify an actual operating system and run it under a simulator. Updated all the assignments and homeworks.

Masters Students University of Washington Bothell

1. Jeremy Gao (2025, Kelvin Sung, Chair) Real Time Snow Deformation
2. Yuze Wang (2025, Bill Erdly, Chair) Refine QuickCheck Vision Screening Application for Clinical Use and Add IOS Support
3. Boyan Hristov (2025, Yang Peng, Chair) Modular and Interactive Simulation Tool (MIST) for Vehicular Edge Computing: A Benchmarking Platform for Dynamic Task Offloading
4. John Fischer (2025, Kelvin Sung, Chair) A Reusable Inventory System
5. Austin Yao (2025, Kelvin Sung Chair) Infinite 2D Map Generation with Nested Wave Function Collapse
6. Tyson Heo (2024, Erika Parsons Chair) EMG Dance: Proof of Concept VR Rhythm Game for Phantom Limb Pain Rehabilitation
7. Jacob Chesnut (2024, Kelvin Sung Chair) Achieving Real Time Ray Traced Rendering for a Virtual Reality Headset Using Foveated Rendering
8. Hongyang Liu (2024, Kelvin Sung Chair) A Comprehensive Categorization Framework for Interactive Fiction Games
9. Sunjil Gahatraj (2024, Erika Parsons Chair) Exploring Neurological Rehabilitation Enhancements: Combining Machine Learning and Robotics in an Edge Computing Environment
10. Arsheya Raj (2024, Erika Parsons Chair) Innovative Rehabilitation Approach for Upper Limb Neurologic Conditions Using Mixed-Reality Simulation and EEG/EMG Biofeedback
11. Karan Chopra (2024, Mark Kochanski Chair) Applying Software Engineering to Develop Features in the Teaching Tool
12. Shubham Patil (2024, Afra Mashhadi Chair) Performance Enhanced Driver Drowsiness Detection System
13. Parker Ford (2024, Kelvin Sung Chair) Real-Time Rendering of Atmospheric Clouds
14. Abdul-Muizz Imtiaz (2024, Afra Mashhadi Chair) Detecting Toxic Emotes Across Twitch Channels
15. Yiwei Tu (2023, Kelvin Sung, Chair) Interactive Watercolor Painting
16. Tyler Choi (2023, Kelvin Sung, Chair) Enhancing Search and Rescue Operations: A Pragmatic Application of User-Centered Development
17. Brandon Vassion (2023, Kelvin Sung, Chair) Investigating Constrained Objects in AR for Validation of Real-life Models
18. Jason Kozodoy (2022, Min Chen, Chair) Automobile Retrieval Price Predictive System using LightGbm with Permutation Feature Importance
19. Brandon Vassion (2022, Kelvin Sung, Chair) Investigating Constrained Objects in AR for Validation of Real-life Models
20. Luyao Wang (2022, Kelvin Sung, Chair) Real-Time Hatch Rendering
21. Andrew Nelson (2022, Kelvin Sung, Chair) Real-Time Caustic Illumination
22. Liwen Fan (2021, Kelvin Sung, Chair) Realistic Fluid Rendering in Real-Time
23. Joe Leung (2021, Kelvin Sung, Chair) An Usr Programmable System Agnostic Real-Time Ray Tracing Framework
24. Sirisha Satyavada (2021, Clark Olson, Chair) Explore UWB in Augmented Reality
25. Abdullah A Syed (2021, David Socha, Chair) Remote Onboarding for Software Engineers: From “Forming” to “Performing”
26. Sukriti Tiwari (2021, David Socha, Chair) Art Website: UX Design and Development
27. Yingming Dang (2020, Kelvin Sung, Chair) Photorealistic and Toon Shading
28. Kaihua Hu (2020, Kelvin Sung, Chair) Real-time Ray tracing in Unity
29. Greg Smith (2020, Kelvin Sung, Chair) Augmented Space Library 2: A Network Infrastructure for Collaborative Cross Reality Applications
30. Joshua Lanman: (2018, Kelvin Sung, Chair) Volumetric Fog
31. Jeremy Albert: (2018, Kelvin Sung, Chair) User-Centric Classification of Virtual Reality Locomotion Methods
32. Robert Bezirganyan (2018, Kelvin Sung, Chair) Thomas M. Brown: (Kelvin Sung, Chair) Suggestions for an Improved Approach to the Cross Reality Collaborative Framework
33. Aaron C. Hitchcock: (2018, Kelvin Sung, Chair) Cross Reality Views Via an Unmanned Aerial Vehicle

Capstone Students University of Washington Bothell

2025 Spring

1. Anoop Prasad - Applying Rust to the CSS Curriculum
2. Maili Le Tran - Software Engineering at Seattle City Light

2025 Winter

1. Ayleen Piteo-Tarpy - Software Engineering at Chewy

2024 Spring

1. Michael Hernandez - Software Engineering at Microsoft
2. Jonathan Spradlin - Software Engineering at Fluke

2024 Winter

1. Arjun Anand - Solving Problems to Prepare for Technical Interviews
2. Ka Hin Choi - Solving Problems to Prepare for Technical Interviews
3. Evan Grey - Software Engineering at CommandLink
4. Jonathan Ha - Solving Problems to Prepare for Technical Interviews
5. Drew HigginBotham - Building a Chess Engine from Scratch
6. Nathan Kolakaluri - Full-Stack Engineer for Costco IT
7. Peter Landstorm - Supporting Software Development at Crane Aerospace
8. Johanna Vo - Solving Problems to Prepare for Technical Interviews
9. Chloe Vu - Solving Problems to Prepare for Technical Interviews

2023 Spring

1. Catherine Tran – Redrive Tool
2. Meng Zhang – Exploring Peer Instruction
3. Mohamed Gas – Exploring Peer Instruction
4. Rashid Ibrahim – Exploring Peer Instruction
5. Phuong Vu – Enhancing Problem-Solving Skills for CSS Students: A Path to Technical Interview

2022 Autumn

1. Ashlyn Bui – Unix with Us
2. Think Dang – Unix with Us
3. Richard Guan – Query Engine for Time Series Data
4. Shushmitha Radjaram – Business Intelligence Engineering Internship Project
5. Samuel Stewart – Ad Workflow Analyzer UI Improvement
6. Neil Wiborg – Software Development Engineer Internship at Amazon

2022 Spring

1. Fred Chan – Data Deduplication and Nearest Neighbor Search
2. Steven Hoc Chau – Solving Technical Problems
3. Jacob David Chesnut – IDEEA: Iterative Game Development
4. Connor Wayne Goodman – Software Engineering Internship at Avanade
5. Alan Lai - Bridgin the Technical Interview Gap with Stepik Leetcode Programming Course
6. Adhiesha Jayasinghe – IDEEA: Iterative Game Development
7. Eric Westman – Leet Programming Team: Bridging the Gap Between the Classroom and Technical Interviews

2022 Winter

1. Aram Antonyan – Frontend Engineer Internship at BusySquirrels
2. Makoto Booth – New Relic Internship

2021 Autumn

1. Makoto Booth – Mobile Apps Engineering @ New Relic
2. Isabel Giang – Roblox: Observability in a Microservice Platform
3. Christopher Hovsepian – Internship at SolidWorks QA Automation Infrastructure
4. David Lam – Bazel Dependencies Mirror Proxy
5. Jay Lin – AccessMap: An Accessible Pedestrian App (Best Poster Award)
6. An Nguyen – Providing Automated Feedback on Programming Assignments
7. Dane Ojala – Internship at 2K/Cat Daddy Games
8. Jeremy Zwang – Providing Automated Feedback on Programming Assignments
9. Adrian Unruh – Alaska Airlines Software Engineer Internship
10. Ginger Rabun – Crafting Programming Lessons to Support Software Engineers

2021 Summer

1. Vandhana Prabhakaran – Amazon AWS Internship
2. Nick Shokri – The Shokri Report
3. Margaret Lanphere – Providing Automated Feedback on Programming Assignments
4. Daniel Yakovlev – T4G LeetCode Programming

2021 Spring

1. Taylor Cumings (Eylar) – Leetcode Problem Solving Workshops
2. Sonlam Nguyen – T4G Leetcode Programming
3. Jacob Pierce – 100 Unity Mechanics for Game Developers
4. Scott Shirley – Deconstructing Technical Problems

2021 Winter

1. Edward Abshire – Improving Novice Developer Feedback
2. Jordan Lawson – 100 Unity Mechanics for Game Developers
3. Samuel Munford – Online Learning for Technical Interviews
4. Mitchell Minh Le Dang – Web Development Internship
5. Joy Lodra – KyFlex Internship

2020 Autumn

1. Angela Ferro Capera — Liberty Mutual Tech Start Internship
2. Estefano Felipa — Kyflex Backend Development Internship
3. Boyan Hristomirov — Internship with Synergistics Inc.
4. Kemba Konteh — Software Engineering at CodeDay
5. Garima Maheshwari — Improving Health Care Amidst a Pandemic
6. Keziah May — Introducing Students to Structured Problem-Solving
7. Nicholas Young — 100 Unity Mechanics for Programmers
8. Bill Zhao — Bridge the Gap: An Online Technical Problem Solving Course

2020 Summer

1. Tabitha Roemish — Ensuring Quality Assurance through Bugs
2. Austin Rich — Reasoning Engine with Python & PyKE
3. Kayla Sprague — Building a Mind

2020 Spring

1. Anya Biryukova: Airship Industries Internship
2. Marcela Gomez — Front-end Development for eCommerce Clients
3. Jenna Martin — QA Automation Framework and Development

2020 Winter

1. Alan Luu — NoteHub: Android app development
2. JD Mauthe — NoteHub: Android app development
3. Pratit Vithalani — Software Engineering Internship at Amazon

2019 Autumn

1. Rithik Bansal — GET Partners RESTful API for the Partner Integration Platform
2. Yunjae Choe — LeetCode Problems
3. Marcela Gomez — LeetCode Problems
4. Leighlyn Ha — Enhancing Seattle's SCADA System
5. Will Hwang — Software Development Internship at Agilysys
6. Samreen Fatima Mohammed — Performance Testing of Amazon Simple Storage Service
7. Nathan Phan — Project Tablet-based Remote Control of Ultrasound Device

2019 Summer

1. Conrad Dudziak — Genetic Algorithm Applications in Artificial Creativity
2. Mariia Lundvall — Software Development for Network Automation - T-Mobile
3. William Ngyuen — University Esports Program Development
4. Luke Smiley — Digital Future Lab: Development Internship
5. Christine Tran — SEED: Software Development at DFL
6. Zihan Sun — XML & XDT Manipulation Desktop Application

2019 Spring

1. Mohamed Abdi: React Native Mobile App Development

Courses Taught at University of Technology Sydney and Others

- Fundamentals of Computer Science
- Fundamentals of Programming
- Applications Programming
- Computing and Information Systems
- Data Structures and Algorithms
- Computer Graphics
- Graphics Project
- Artificial Intelligence
- Knowledge Systems
- Virtual Worlds
- Digital Media Technologies
- Digital Multimedia
- 3D Animation
- iOS Games Development
- Game Design and Implementation
- Introduction to Computer Game Design
- Introduction to Computer Game Programming
- Game Design Studio I (2D Focus)
- Game Design Studio II (3D Focus)

Masters and PhD Students at University of Technology Sydney and Others

1. Chen Si (2017). PhD Thesis: Believable Exploration: Investigating Human Exploration Behaviour to Inform the Design of Believable Agents in Video Games. UTS, Sydney, Australia.
2. ... to be added when I dig through archives

PUBLICATIONS

Google Scholar: Citations: 781, h-index 13, i10-index 18

Books and Edited Proceedings

1. Pisan, Y., Sgouros, N. M. and Marsh, T (Editors). (2014) Entertainment Computing - ICEC 2014, Springer-Verlag Berlin Heidelberg.

2. Pisan, Y. (Editor). (2005). *Proceedings of the Second Australasian Conference on Interactive Entertainment (IE2005)*. Sydney, Australia: Creativity and Cognition Studios Press.
3. Pisan, Y. (Editor). (2004). *Proceedings of the First Australian Workshop on Interactive Entertainment (IE2004)*. Sydney, Australia: Creative Cognition Studios Press.

Book Chapters

4. Garcia, J. A., Felix Navarro, K., Schoene, D., Smith, S. T., & Pisan, Y. (2012). Exergames for the elderly: Towards an embedded Kinect-based clinical test of falls risk. In A. J. Maeder & F. J. Martin-Sanchez (Eds.), *Studies in Health Technology and Informatics* (pp. 51–57). IOS Press. doi:10.3233/978-1-61499-078-9-51

Book Reviews

5. Pisan, Y. Review of “Twisty Little Passages: An Approach to Interactive Fiction Artificial Intelligence”. To appear in *Artificial Intelligence Journal*. Elsevier Science Publishers Ltd.

Refereed Journal Articles

6. Pisan, Y (2024). Evolution of the Software Toolchain for Computer Science Students. *Creative Education*, 15, 1223-1236. <https://doi.org/10.4236/ce.2024.156074>
7. Bakkes, S., Tan, C. T., & Pisan, Y. (2012). Personalised Gaming. *Journal of Creative Technologies*, 1(3). Retrieved from <http://journal.colab.org.nz/article/24>
8. Garcia, J. A., Felix Navarro, K., Schoene, D., Smith, S. T., & Pisan, Y. (2012). Exergames for the elderly: Towards an embedded Kinect-based clinical test of falls risk. *Studies in health technology and informatics*, 178, 51–7. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/22797019>
9. Pisan, Y. (2007). Book Review: Nick Montfort, *Twisty Little Passages: An Approach to Interactive Fiction*, 171 (18). Elsevier Publishers. (Science Direct)
10. Pisan, Y. (2006). Artificial Intelligence versus Clever Design for Creating Intelligent Game Characters. *Journal of Computational Information Systems*, 2 (1), pp 429-433. Binary Information Press
11. Berry, R.A., Makino, M., Hikawa, N., Naemura, M., Pisan, Y., Edmonds, E.A. (2006) *Programming in the World*. Digital Creativity 2006, 17 (1), pp. 36-48. Routledge Publishers.
12. Pisan, Y. (2006). Artificial Intelligence versus Clever Design for Creating Intelligent Game Characters. *Journal of Computational Information Systems*, 2(1), 429-433.

Refereed Conference Papers

13. Pisan, Y., Eyler, T*, Ferguson, E.*, & Liu, D.* (2024). The Evolution of Computer Science Education. In *Proceedings of the 20th International Conference on Foundations of Computer Science*. (accepted as extended abstract)
14. Pisan, Y. (2024). A Toolchain-First Approach for Programming Courses. In *Proceedings of the 20th International Conference on Frontiers in Education*. (accepted as extended abstract)
15. Suciu, V*, Giang, I*, Zhao, B*, Runandy, J*, Dang, M* (2021). Generating Hints for Programming Problems Without a Solution. *SIGCSE 21: Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. <https://doi.org/10.1145/3408877.3439691>
16. Si, C., Pisan, Y., & Tan, C. T. (2016). Understanding players’ map exploration styles. In *Proceedings of the Australasian Computer Science Week Multiconference*.
17. Brondi, R., Avveduto, G., Alem, L., Faita, C., Carrozzino, M., Tecchia, F., Bergamasco, M. (2015). Evaluating the effects of competition vs collaboration on user engagement in an immersive game using natural interaction. In *Proceedings of the 21st ACM Symposium on Virtual Reality Software and Technology* (p. 191).
18. Garcia, J. A., Pisan, Y., Tan, C. T., & Felix Navarro, K. (2014). Step kinnection: a hybrid clinical test for fall risk assessment in older adults. In *CHI’14 Extended Abstracts on Human Factors in Computing Systems* (pp. 471–474).
19. Garcia, J. A., Pisan, Y., Tan, C. T., & Navarro, K. F. (2014). Assessing the kinect’s capabilities to perform a time-based clinical test for fall risk assessment in older people. In *Entertainment Computing--ICEC 2014* (pp. 100–107). Springer Berlin Heidelberg.
20. Marsh, T., Pisan, Y., & Sgouros, N. M. (2015). *Entertainment Computing 2014-13th International Conference on Entertainment Computing*. Pisan, Y., Sgouros, N. M., & Marsh, T. (2014). *Entertainment Computing-ICEC*

- 2014: 13th International Conference, ICEC 2014, Sydney, Australia, October 1-3, 2014, Proceedings (Vol. 8770). Springer.
21. Si, C., Pisan, Y., & Tan, C. T. (2014). A Scouting Strategy for Real-Time Strategy Games. In Proceedings of the 2014 Conference on Interactive Entertainment (pp. 1–8).
 22. Tan, C., Sapkota, H., Rosser, D. J., & Pisan, Y. (2014). Initial perceptions of a casual game to crowdsource facial expressions in the wild. *Foundations of Digital Games*.
 23. Tan, C. T., Bakkes, S., & Pisan, Y. (2014). Correlation between Facial Expressions and the Game Experience Questionnaire. *Entertainment Computing-ICEC 2014: 13th International Conference, ICEC 2014, Sydney, Australia, October 1-3, 2014, Proceedings*, 8770, 229.
 24. Tan, C. T., Bakkes, S., & Pisan, Y. (2014). Inferring player experiences using facial expressions analysis. In Proceedings of the 2014 Conference on Interactive Entertainment (pp. 1–8).
 25. Tan, C. T., Sapkota, H., Rosser, D., & Pisan, Y. (2014). A game to crowdsource data for affective computing. *Proceedings of Foundations of Digital Games*, 11.
 26. Taylor, D. M., & Pisan, Y. (2014). Aussie women game developers. *Proceedings of the 9th International Conference on the Foundations of Digital Games*.
 27. Tan, C. T., Sapkota H., Rosser, D., and Pisan, Y (2014) “A Game to Crowdsource Data for Affective Computing,” in *Proceedings of the Foundations of Digital Games (FDG)*.
 28. Si, C., Pisan, Y, and Tan, C. T., (2014) Automated Terrain Analysis in Real-Time Strategy Games,” in *Proceedings of the Foundations of Digital Games (FDG) Doctoral Consortium*.
 29. Tan, C. T., Huang, J., and Pisan, Y. (2013) “Initial Perceptions of a Touch-based Tablet Handwriting Serious Game from a Player’s Perspective,” in *International Conference on Entertainment Computing (ICEC)*.
 30. Garcia, J., Pisan, Y., Tan, C. T., and Navarro, K. F. (2012) “Step Kinnection: A Hybrid Clinical Test for Fall Risk Assessment in Older Adults,” in *Proceedings of the Conference on Human Factors in Computing Systems (CHI) Extended Abstracts*.
 31. Tan, C. T., Rosser, D., Bakkes, S., & Pisan, Y. (2012). A feasibility study in using facial expressions analysis to evaluate player experiences. *Proceedings of The 8th Australasian Conference on Interactive Entertainment Playing the System – IE ’12* (pp. 1–10). New York, New York, USA: ACM Press. doi:10.1145/2336727.2336732
 32. Bakkes, S., Tan, C. T., & Pisan, Y. (2012). Personalised gaming: a motivation and overview of literature. *Proceedings of The 8th Australasian Conference on Interactive Entertainment Playing the System – IE ’12* (pp. 1–10). New York, New York, USA: ACM Press. doi:10.1145/2336727.2336731
 33. Tan, C. T., & Pisan, Y. (2012). Towards Automated Player Experience Detection With Computer Vision Techniques. *Proceedings of the CHI Workshop on Game User Research*. Retrieved from http://hcigames.businessandit.uoit.ca/chigur/wp-content/uploads/2012/04/gurchi2012_submission_11.pdf
 34. Pisan, Y., & Tan, C. T. (2012). Persuasive Environments : Argumentation Models in Serious Games. *ICCSE 2012: The 7th International Conference on Computer Science and Education* (pp. 1319–1322). Melbourne, Australia: IEEE. doi:10.1109/ICCSE.2012.6295308
 35. Pisan, Y., & Tan, C. T. (2012). SimEnv : Understanding and Supporting the Creation of Outcome-driven Simulations. *ICCSE 2012: The 7th International Conference on Computer Science and Education* (pp. 1315–1318). Melbourne, Australia: IEEE. doi:10.1109/ICCSE.2012.6295307
 36. Pisan, Y., & Tan, C. T. (2012). Use of Student-designed Authorware for E-mediated Science and Technology Learning. *ICCSE 2012: The 7th International Conference on Computer Science and Education* (pp. 1633–1637). Melbourne, Australia: IEEE. doi:10.1109/ICCSE.2012.6295377.
 37. Viveka Weiley (2009) Remixing realities: distributed studios for collaborative creativity, 345-346. In *C&C ’09: Proceeding of the seventh ACM conference on Creativity and Cognition*.
 38. Hills, D., Edmonds, E. and Pisan, Y. (2008). Towards a Generic Framework for Situated Collaborative Storytelling. In *Proceedings of the Fifth Australasian Conference on Interactive Entertainment (IE2008)*, Brisbane, Australia.
 39. Weiley, V. and Pisan, Y. (2008). The Distributed Studio: Towards a Theory of Virtual Place for Creative Collaboration. In *Proceedings of the 20th Australasian Conference on Human-Computer Interaction (OZCHI-2008)*, Cairns, Australia.

40. Pisan, Y. Dissecting Group Identity in MMOs. To appear in the *Proceedings of The European Simulation and AI in Games (GAMEON-NA 2007)*. Gainesville, Florida, USA.
41. Pisan, Y. My Guild, My People: Role of Guilds in Massively Multiplayer Online Games. To appear in the *Proceedings of the Fourth Australasian Conference on Interactive Entertainment (IE2007)*. Melbourne, Australia.
42. Kang, Y. and Pisan, Y. A Survey of Major Challenges and Future Directions for Next Generation Pervasive Computing. In *Proceedings of the 21st International Symposium on Computer and Information Sciences*. Istanbul, Turkey.
43. Berry, R. A., Naemura, M., Kobayashi, Y., Tada, M., Inoue, N., Pisan, Y., et al. (2006). An Interface Test-Bed for Kansei Filters Using the Touch Designer Visual Programming Environment. In *Proceedings of the Australasian User Interface Conference (AUIC2006)* (pp 173-176). Hobart, Australia.
44. Pisan, Y. (2005). Everything I Learned from The Sims: Putting Games in Context. In *Proceedings of the IADIS WWW/Internet Conference on Advanced Learning* (pp. 96-100). Lisbon, Portugal.
45. Welsh, S., & Pisan, Y. (2005). Enhancing Information Acquisition in Game Agents. In *Proceedings of the International Conference on Artificial Intelligence* (pp. 527-533). Las Vegas, Nevada, USA: CSREA Press.
46. Welsh, S., & Pisan, Y. (2005). Information-Oriented Design and Game AI. In *Proceedings of Second Australasian Conference on Interactive Entertainment* (pp. 227-234). Sydney, Australia.
47. Pisan, Y. (2004). Challenges for network computer games. In *Proceedings of the IADIS International Conference WWW/Internet* (pp. 589-595). Madrid, Spain: IADIS Press.
48. Pisan, Y., & Wong, C. W. (2004). Tools for creating interactive teaching environments. In *Proceedings of The 4th International Conference on Advanced Learning Technologies (ICALT)* (pp. 819-821). Joensuu, Finland: IEEE Computer Society.
49. Jayashree, J., Richards, D., & Pisan, Y. (2002). Helping teachers implement experience based learning. In *Proceedings of the International Conference on Computers in Education (ICCE)* (pp. 1396-1397). Auckland, New Zealand: IEEE Press.
50. Orgun, B., Pisan, Y., Nayak, A., & Vu, J. (2002). Interoperability in heterogeneous medical information systems using smart mobile agents and HL7. In *Proceedings of the 5th International Conference on Information Technology (CIT2002)* (pp. 1396-1397). Bhubaneswar, India: Tata McGraw-Hill.
51. Pisan, Y., Richards, D., Sloane, A., Konchek, H., & Mitchell, S. (2003). Submit! A Web based system for automatic program critiquing. In *Proceedings of The 5th Australasian Computing Education Conference (ACE2003)* (pp. 59-68). Adelaide, Australia: Australian Computer Society.
52. Pisan, Y., Sloane, A., Richards, D., & Dale, R. (2002). Providing timely feedback to large classes. In *Proceedings of the International Conference on Computers in Education (ICCE)* (pp. 413-414). Auckland, New Zealand: IEEE Press.
53. Roberts, M. (2002). Artificial Actors for Real World Environments. In *Proceedings of AAAI Spring Symposium on Artificial Intelligence and Interactive Entertainment* (pp. 87-94). Menlo Park, CA, USA: AAAI Press. (honours supervision which led to Matt Roberts receiving the University Medal)
54. Orgun, B., Pisan, Y., & Vu, J. (2002). eMAGS - Interoperability in heterogeneous medical information systems using smart mobile agents and HL7. In *Preliminary Report Proceedings of the 3rd HL7 International Affiliates Meeting (HL72002)* (pp 1396-1397). Melbourne, Australia.
55. Pisan, Y., & Nayak, A. (2001). Increasing believability: Agents that justify their actions. In *Proceedings of The 10th IEEE International Conference on Fuzzy Systems* (pp. 1347-1350). Melbourne, Australia: IEEE Press.
56. Pisan, Y. (2001). Should intelligence be more than pixel deep. In *Proceedings of The International Conference on the Application and Development of Computer Games in the 21st Century* (pp. 124-129). Hong Kong: City University of Hong Kong.
57. Pisan, Y. (2000). Character building: A form of knowledge acquisition. In *Proceedings of AAAI Spring Symposium on AI and Interactive Games* (pp. 66-69). Stanford, CA, USA: AAAI Press.
58. Pisan, Y. (2000). Extending requirement specification using analogy. In *Proceedings of International Conference on Software Engineering (ICSE)* (pp. 69-76). Limerick, Ireland: ACM Press.
59. Pisan, Y. (1998). Using analogy to elaborate requirement specifications. In *Proceedings of the First Asia-Pacific Workshop on Intelligent Software Engineering* (pp. 37-47). Singapore.

60. Pisan, Y., & Bachmann, A. (1998). Using qualitative reasoning to solve dynamic problems. In *Proceedings of the Twelfth International Workshop on Qualitative Reasoning* (pp. 167-173). Cape Cod, MA, USA: AAAI Press.
61. Pisan, Y. (1997). AI for everyone: Reaching all undergraduate students. In *Proceedings of the First Australian Workshop on Artificial Intelligence Teaching and Practice*. Perth, Australia.
62. Pisan, Y. (1997). Controlling engineering problem solving. In *Proceedings of the Tenth Australian Joint Conference on Artificial Intelligence* (pp. 496-504). Perth, Australia: Springer-Verlag, LNAI.
63. Pisan, Y. (1997). Functional roles of equations. In *Proceedings of the Tenth Australian Joint Conference on Artificial Intelligence* (pp. 92-97). Perth, Australia: ACS National Committee on Artificial Intelligence and Expert Systems.
64. Pisan, Y. (1996). Controlling engineering problem solving. In *Proceedings of the Tenth International Workshop on Qualitative Reasoning about Physical Systems* (pp. 190-197). Stanford Sierra Camp, CA, USA: AAAI Press.
65. Pisan, Y. (1995). A visual routines based model of graph understanding. In *Proceedings of the Seventeenth Annual Conference of the Cognitive Science Society* (pp. 692-697). Pittsburgh, PA, USA: Lawrence Erlbaum Associates.
66. Pisan, Y. (1994). Visual reasoning about physical properties via graphs. In *Proceedings of the Eight International Workshop on Qualitative Reasoning about Physical Systems* (pp. 205-211). Nara, Japan.

Theses

67. Pisan, Y. (1998). *An integrated architecture for engineering problem solving*. Unpublished Doctoral dissertation, Northwestern University, Evanston, IL, USA.

* Indicates undergraduate student

COMPETITIVE RESEARCH & TEACHING DEVELOPMENT GRANTS

1. Jolly Feedback: An Automated Student Feedback System, Computing & Software Systems Research Grant, \$5,000, 2019
2. Invited Speaker: Dr. Magy Seif El-Nasr, Computing & Software Systems Research Grant, \$500, 2019
3. Adaptable Game Mechanics, *FEIT Industry Research Seed Fund*, \$3,000, 2016
4. Peer Teaching Feedback Based on Classroom Observation, *FEIT Learning and Teaching Grant*, \$6,256, 2016-2017
5. Connecting Physical and Virtual Interaction Spaces: Community Building through Location-Based Games, *UTS Challenge Grant*, \$46,785 2009-2010
6. SimEnv: Understanding and Supporting the Creation of Outcome Driven Simulations, *FEIT Research Scheme*, \$4,035, 2009
7. GameLab: Supporting Location Based Games, *Research Infrastructure Block Grants Scheme*, \$59,350, 2007-2008
8. Virtual Communities, *Australian CRC for Interaction Design*, \$394,000, 2006
9. Creative Communities, *Australian CRC for Interaction Design*, \$269,141, 2006
10. SimEnv: Understanding and Supporting the Creation of Outcome Driven Simulations, *UTS Research Excellence Grant*, \$29,312, 2006-2007
11. Creative Collaboration, *Australian CRC for Interaction Design*, \$98,771, 2005-2006
12. GONDOLA: An intelligent and interactive software-based learning environment, *Faculty of IT Teaching Development Grant*, \$2000, 2005
13. 3D Browsing and Collaborative Design, *Faculty of IT Research Seed Grant*, \$20,000, 2004-2005
14. Hardware for Graphics and Virtual Reality Applications, *Macquarie University Major Equipment Grant*, \$90,000, 2003
15. Computer Graphics in Learning Japanese Prepositions, *Macquarie University Teaching Development Grant*, \$5,000, 2002

16. Reasoning with Action Diagrams and Diagram Sequences, *Macquarie University New Staff Grant*, \$19,500, 2002
17. Automated Program Critiquer: Submit!, *Macquarie University Flagship Grant*, \$46,000, 2001-2002
18. Using Multi-Agent Environments Based on Real World Models, *Macquarie University Research Grant (ARC Small Grant)*, \$6,500, 2001
19. Multimodal Reasoning with Diagram Sequences, *Macquarie University Research Development Scheme*, \$5,600, 2000-2001
20. Evaluation and Adaptation of Software Tools, *Macquarie University Teaching Development Grant*, \$5,000, 2000-2001

CONTRIBUTIONS TO UNIVERSITY

- | | |
|--------------|---|
| 2024-2026 | Representing STEM on General Faculty Organization Executive Council |
| 2025 | Course Compensation Policy Committee, Ad-Hoc committee formed by VCAA |
| 2025-2026 | CSS Assistant Teaching Professor Faculty Search Committee (chair) |
| 2024-2025 | CSS Assistant Teaching Professor Faculty Search Committee (chair) |
| 2024-2025 | CSS Infrastructure Committee |
| 2023-2024 | CSS Assistant Teaching Professor Faculty Search Committee (chair) |
| 2023-2024 | CSS Liaison for the STARS Program |
| 2022-2023 | CSS Infrastructure Committee |
| 2020-ongoing | Founded the Tech for Good (T4G) Research Group |
| 2020-ongoing | Faculty Advisor to UWB Husky Game Development Club |
| 2020-2023 | Faculty Council on Academic Standards (FCAS) |
| 2020-2022 | Campus Council on Academic Standards & Curriculum (CCASC) |
| 2020-2022 | STEM School Curriculum Council on Learning (SSCCL, chair) |
| 2020-2022 | CSS Undergraduate Curriculum Committee (chair) |
| 2020-2021 | CSS Teaching-Track Faculty Search Committee (chair) |
| 2020-2021 | Learning Community: Learning from Success and Failure in Teaching (co-facilitator) |
| 2020 | School of STEM Digital Instruction Resource Team (DIRT) |
| 2020 | Lecturers Full-Time and Part-Time Merit and Progress to Promotion Committee (chair) |
| 2019-2020 | CSS Lecturer-Track Faculty Search Committee (chair) |
| 2018-2019 | CSS Infrastructure Committee |
| 2017-2018 | Interactive Media Design, Academic Oversight Committee |
| 2016-2017 | Course Directory for Animal Logic Academy Masters degree |
| 2016-2017 | Elected to Academic Board |
| 2016-2017 | Elector to the Faculty of Engineering and IT Board |
| 2016 | Search Committee Member for new Lecturer/Senior Lecturer |
| 2015-2017 | Elected to PEP (sabbatical) Committee |
| 2009 | Head of Search Committee for new Lecturer/Senior Lecturer |
| 2005-2007 | Elected to Academic Board |
| 2004-2006 | Elected to Faculty of IT Board |
| 2004-2006 | Elected to represent Faculty of IT on Faculty of Engineering Board |
| 2004-2006 | Appointed to Faculty of IT Undergraduate Curriculum Redesign Committee |
| 2004-2017 | Elected to Faculty of IT Graduate Studies Committee |
| 2004-2017 | Appointed as Faculty of IT representative for <i>Master of Animation</i> course |

CONTRIBUTIONS TO COMMUNITY

A. Appointments & Elected Positions

1. Academic Board for Raffles College (2016)
2. International Reader for Australia Research Council (2006-2007)
3. Leader of International Game Developers Association task force to revise computer game studies curriculum (2006-2008)

4. Sydney ACM SIGGRAPH board member (2003-2008)

B. Program Committee Memberships and Reviewer for

1. CHIPlay (2016)
2. Entertainment Computing (2012-)
3. Plos One (2016-)
4. Web3D (2016)
5. Transactions on Affective Computing (2012)
6. Foundation of Digital Games (program chair 2009, track chair 2017, reviewer 2007-2019)
7. International Conference on Entertainment Computing (ICEC, conference chair 2014, reviewer 2012-)
8. Journal of Game Development (2008)
9. Australian Research Council (2007-2017)
10. Creativity and Cognition conference (2007, 2005)
11. Agent Based Systems for Human Learning Workshop (2006)
12. Computer Graphics, Imaging and Visualization conference (2006)
13. Engage conference (2006)
14. GRAPHITE conference (2006, 2005, 2004, 2003)
15. International Conference on Computer and Information Sciences (2006)
16. Generative Arts and Practice conference (2005)
17. Technologies for Interactive Storytelling and Entertainment (2004)
18. International Network for Engineering Education and Research conference (2004)
19. Interaction conference (2004)
20. Pacific Rim International Conference on Artificial Intelligence (2004)
21. GRAPHITE (tutorials chair 2003)
22. Expertise in Design conference (2003)
23. IASTED Technical Committee on Artificial Intelligence and Expert Systems (2003-2008)
24. Australasian Conference on Interactive Entertainment (founded the conference in 2003, chair 2004, 2005, 2015; program chair 2006, 2007, 2008, reviewer 2003-)

C. Visitors Hosted

1. Roger Altizer, University of Utah (2020 via Zoom)
2. Tiffany Barnes, NC State University (2020 via Zoom)
3. Mark Billingham, University of South Australia (2020 via Zoom)
4. Ian Bogost, Georgia Tech (2020 via Zoom)
5. Magy Seif El-Nasr, University California, Santa Cruz (2020 via Zoom)
6. Kenneth D. Forbus, Northwestern University (2020 via Zoom)
7. Ed Fries, 1Up Ventures (2020 via Zoom)
8. Lindsay Grace, University of Miami (2020 via Zoom)
9. Tim Menzies, NC State University (2020 via Zoom)
10. Doug Pearson, FlowPlay (2020 via Zoom)
11. Brooks Peck, Seattle Museum of Pop Culture (2020 via Zoom)
12. Andy Phelps, HITLabNZ, University of Canterbury (2020 via Zoom)
13. Brenda Romero Bafta-winning game designer (2020 via Zoom)
14. Howard Rose, Firsthand Technology (2020 via Zoom)
15. Leila Alem, CSIRO (Adjunct Professor at Games Studio, 2014-2018)
16. Yang Li, Suzhou University of Science & Technology (2016)
17. Antonio Capodiecici, University of Salento (2015)
18. Yachao Zhu, Guangxi University of Science and Technology (2015)
19. Raffaello Bronti, Scuola Superiore Sant'Anna (2014)
20. Carrol O'Sullivan, Trinity College, Ireland (2013)
21. Robin Hunicke, Funomena (2012)
22. Mitch Olson, Gamedojo NZ (2012)
23. Brian Schwab, Blizzard Entertainment (2012)

24. Magy Seif El-Nasr, Simon Frasier University (2009)
25. Alessandro Canossa, ITU Copenhagen (2008, 2009)
26. Ken Forbus, Northwestern University (2008)
27. Andrew Gordon, University of Southern California (2006, 2004, 2001)
28. Roger Melina, Leonardo, The International Society for the Arts, Sciences and Technology (2006)
29. Karen Schrier, PhD student MIT Media Lab (2006)
30. Mark Pesce, Inventor VRML (2005)
31. Tracy Fullerton, University of Southern California (2005)
32. Stacey Spiegel, New Media Designer (2005)
33. Henry Lieberman, MIT Media Lab (2005)
34. Elisabeth Sylvan, PhD student MIT Media Lab (2005)
35. Ted Selker, MIT Media Lab (2004)
36. Maggie Boden, University of Sussex (2004)
37. Susumu Kunifuji, Japan Advanced Institute of Science and Technology (2004)
38. Chris Crawford, Independent Game Developer (2004)
39. Tim Menzies, NASA Independent Verification and Validation Facility (2003)
40. Tom Hewett, Drexel University (2003)
41. ACM SIGGRAPH delegation: Judy Brown, ACM past president; Alan Chalmers, University of Bristol; David Arnold, University of Brighton (2002)

D. Theses Examined

1. Lauren Ferro, PhD, RMIT (2017)
2. Sven Krome, PhD, RMIT (2017)
3. Glen Robertson, PhD, University of Auckland (2016)
4. David Conroy, PhD, Queensland University of Technology (2015)
5. Jennifer Sandercock, Masters, RMIT University (2009)
6. Ken Newman, PhD, Griffith University (2007)
7. Wen Poh Su, Queensland University of Technology (2007)
8. Owen Bourne, Griffith University (2006)
9. Boon Kuang Tan, PhD, RMIT (2006)
10. Owen Bourne, PhD, Griffith University (2006)
11. Penny Sweetster, PhD, University of Queensland (2005)
12. Paul Kearney, Masters, Unitec New Zealand (2005)

E. Miscellaneous

1. Radio Interview on Pokemon Go, (2016)
2. Expert Opinion on SMH Digital Life (2014)
3. Invited Panelist for Persuasive 2013
4. Evaluation consultant, *Mobile Gaming*, Jadavpur University, India (2006)
5. Evaluation consultant, *Software Engineering and Game Design* McMaster University, Canada (2005)
6. Invited panelist, FreePlay conference (2005)
7. Reviewer, International Association for Science and Technology Development Journal

(last updated Oct 2025)