

Yusuf Pisan

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Nationality: Citizen of Australia (eligible to work in USA)

Current Position: Associate Professor, University of Technology Sydney

Research Interests: Artificial Intelligence – computer game design, diagrammatic reasoning, computer graphics, qualitative reasoning

Academic Qualifications

B.S.	1992	Computer Science Northwestern University, Evanston, IL, U.S.A.
Ph.D.	1998	Northwestern University, Evanston, IL, U.S.A. Title: <i>An integrated architecture for engineering problem solving</i> Supervisor: Professor Ken Forbus
PGCertEdS	2001	Higher Education Macquarie University, Sydney, Australia

Positions Held

Jan 2008 – present	Associate Professor Department of Software Engineering University of Technology, Sydney
June 2003 – Jan 2008	Senior lecturer Department of Software Engineering University of Technology, Sydney
Jan 2003 – Jun 2003	Senior Lecturer Department of Computing Macquarie University
Feb 2000 – Jan 2003	Lecturer Department of Computing Macquarie University
Jul 1998 – Feb 2000	ARC Research Fellow: School of Computer Science and Engineering University of New South Wales
Sep 1992 – Jun 1998	Research Assistant Institute for the Learning Sciences

Northwestern University

Teaching Grants

2006	UTS Teaching Award
2005	GONDOLA: An intelligent and interactive software-based learning environment, 2005
2002	Using Computer Graphics in Learning Japanese Prepositions Macquarie University Teaching and Development Grant
2001-2002	Automated program critiquer: Submit! Macquarie University Flagship Grant
2000-2001	Evaluation and Adaptation of Software Tools Macquarie University Teaching and Development Grant

Research Grants

2007-	Virtual Communities Australian CRC for Interaction Design (ACID)
2006-	Creative Communities Australian CRC for Interaction Design (ACID)
2005-2006	SimEnv: Understanding and Supporting the Creation of Outcome Driven Simulations, 2006-2007 UTS Research Excellence Grant
2005	Creative Collaboration Australian CRC for Interaction Design (ACID)
2005	3D Browsing and Collaborative Design UTS, Faculty of Information Technology Seed Grant
2004	Educating Novice Requirements Engineers UTS, Information Technology and Educational Development
2003	Hardware for graphics and virtual reality applications Macquarie University Major Equipment Grant
2002	Reasoning with Action Diagrams and Diagram Sequences Macquarie University New Staff Grant
2001	Multimodal Reasoning with Diagram Sequences Macquarie University Research Dev. Scheme (small ARC)
2001	Using Multi-Agent Environments Based on Real World Models Macquarie University Research Grant

Subjects Taught

Computer Game Design
Computer Game Programming
Virtual Worlds, Real Communities
Computer Graphics
Knowledge Systems (Artificial Intelligence)
Building problem Solvers (Applied Artificial Intelligence Techniques)
Data Structure and Algorithms

Fundamentals of Computer Science (Programming and Computer Architecture)
Computing and Information Systems (Visual Basic, SQL)

I have taught subjects with as many as 700 students and as few as 5. I have had outstanding teaching evaluations and been listed on the Dean's list of best lecturer every semester.

Over the years, I have also

- Become an expert programmer in C/C++, java, Lisp, Scheme, perl, php
- Coached undergraduate students for the ACM Programming Competition
- Earned "Microsoft Certified Software Developer for .NET" (MCSD)
- Worked as an AIX systems administrator and continue to maintain my own Linux and Windows boxes
- Been interviewed multiple times for newspapers, magazines and radio programs.

Publications

Conference Publications with Published Proceedings

1. Proceedings of the Fourth Australasian Conference on Interactive Entertainment, Melbourne, Australia, 3-5 December 2007, Edited by Yusuf Pisan, Larissa Hjorth, Esther Milne and Martin Gibbs. ISBN 978-1-921166-87-7.
2. Pisan, Y. (2007). Book Review: Nick Montfort, *Twisty Little Passages: An Approach to Interactive Fiction*, 171 (18). Elsevier Publishers.
3. Pisan, Y. (2007). My Guild, My People: Role of Guilds in Massively Multiplayer Online Games. In the Proceedings of the Fourth Australian Conference on Interactive Entertainment (IE2007), Melbourne, Australia.
4. Pisan, Y. (2007). Dissecting Group Identity in MMOs. In the Proceedings of the Third International North American Conference on Intelligent Games and Simulation (GAMEON-NA), Gainesville, USA.
5. 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
6. 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.
7. Kang, Yong-Bin Kang and Pisan, Y. (2006) 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, pages 755-764]
8. Berry, R., Naemura, M., Kobayashi, Y., Tada, M., Inoue, N., Pisan, Y. & Edmonds, E. (2006) "An Interface Test-Bed for Kansei Filters Using the Touch Designer Visual

Programming Environment" In the Proceedings of the 7th Australasian User Interface Conference (AUIC2006), Hobart, Australia.)

9. Proceedings of the Second Australasian Conference on Interactive Entertainment, Sydney, Australia, 23-25 November 2005, Edited by Yusuf Pisan, ISBN 0-9751533-2-3.
10. Pisan, Y. (2005) "Everything I Learned from The Sims: Putting Games in Context" In the Proceedings of the IADIS WWW/Internet Conference, Lisbon, Portugal. (pdf)
11. Welsh, S. and Pisan, Y. (2005). Enhancing Information Acquisition in Game Agents. In the Proceedings of the International Conference on Artificial Intelligence, Las Vegas, Nevada, USA. (pdf)
12. Welsh, S. and Pisan, Y. (2005). Information-oriented design and game AI. In the Proceedings of the Second Australasian Conference on Interactive Entertainment (IE2006), Sydney, Australia. (ACM Digital Library)
13. Proceedings of the Australian Workshop on Interactive Entertainment, Sydney, Australia, February 2004, Edited by Yusuf Pisan, ISBN 0-9751533-0-8. Available from <http://research.it.uts.edu.au/creative/ie/>
14. Pisan, Y. and Wong, C. W. (2004) "Tools for Creating Interactive Teaching Environments". Proceedings of the 4th IEEE International Conference on Advanced Learning Technologies, Joensuu, Finland.
15. Pisan, Y. (2004) "Challenges for Network Computer Games". Proceedings of the IADIS WWW/Internet Conference on Advanced Learning, Madrid, Spain
16. Pisan, Y. Richards, D., Sloane, A., Koncek, H. & Mitchell, S. (2003). Submit! A web-based system for automatic program critiquing. In Proceedings of The Fifth Australasian Computing Education Conference (ACE), Adelaide, Australia.
17. Orgun, B., Pisan, Y., Nayak, A. and Vu, J. (2002). Interoperability in heterogeneous medical information systems using smart mobile agents and HL7. In Proceedings of the Fifth International Conference on Information Technology (CIT2002), 127-130, Bhubaneswar, India: Tata McGraw-Hill, ISBN: 0-07-050273-0.
18. Pisan, Y., Sloane, A., Richards, D. and Dale, R. (2002). Providing timely feedback to large classes. In Proceedings of the International Conference on Computers in Education (ICCE), 413-414, Auckland, New Zealand: IEEE Press, ISBN: 0-7695-1509-6.
19. Jayashree, J., Richards, D. and Pisan, Y. (2002). Helping teachers implement experience based learning. In Proceedings of the International Conference on Computers in Education (ICCE), 1396-1397, Auckland, New Zealand: IEEE Press, ISBN: 0-7695-1509-6.
20. Pisan, Y. & Nayak, A. (2001). Increasing believability: Agents that justify their actions. In Proceedings of The 10th IEEE International Conference on Fuzzy Systems, 1347-1350, Melbourne: IEEE Press, ISBN: 1098-7584. ***I was invited to present a paper at this conference.***

21. 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, 124-129, Hong Kong: City University of Hong Kong, ISBN: 962-442-199-4.
22. Pisan, Y (2000). Extending Requirement Specification Using Analogy. In Proceedings of International Conference on Software Engineering (ICSE), 69-76, Limerick, Ireland: ACM Press, ISBN: 1-58113-206-9, ISSN 0270-5257.
23. Pisan, Y (2000). Character building: A form of knowledge acquisition. In Proceedings of AAAI Spring Symposium on AI and Interactive Games, 66-69, Stanford, California: AAAI Press, ISBN: 1-57735-108-8.
24. Pisan, Y., & Bachmann, A. (1998). Using qualitative reasoning to solve dynamic problems. In Proceedings of the Twelfth International Workshop on Qualitative Reasoning, 167-173, Cape Cod, Massachusetts: AAAI Press, ISBN 1-57735-054-5..
25. Pisan, Y. (1997). Controlling engineering problem solving. In Proceedings of the Tenth Australian Joint Conference on Artificial Intelligence, 496-504, Perth, Australia: Springer-Verlag, LNAI, ISBN: 3-540-63797-4.
26. Pisan, Y. (1997). Functional roles of equations. In Proceedings of the Tenth Australian Joint Conference on Artificial Intelligence, 92-97, Perth, Australia: ACS National Committee on Artificial Intelligence and Expert Systems.
27. Pisan, Y. (1996). Using qualitative representations in controlling engineering problem solving. In Proceedings of the Tenth International Workshop on Qualitative Reasoning about Physical Systems, 190-197, Stanford Sierra Camp, CA: AAAI Press, ISBN 1-57735-001-4.
28. Pisan, Y. (1995). A visual routines based model of graph understanding. In Proceedings of the Seventeenth Annual Conference of the Cognitive Science Society, 692-697, Pittsburgh, PA: Lawrence Erlbaum Associates, ISBN: 0-8058-2159-7.

International Workshops with Published Proceedings

29. Pisan, Y. (1998). Using analogy to elaborate requirement specifications. In Proceedings of the First Asia-Pacific Workshop on Intelligent Software Engineering, 37-47, Singapore
30. 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: University of South Australia.
31. Pisan, Y. (1994). Visual reasoning about physical properties via graphs. In Proceedings of the Eight International Workshop on Qualitative Reasoning about Physical Systems, Nara, Japan, 205-211.

National Workshops with Published Proceedings

32. Orgun, B., Pisan, Y. & Vu, J. (2002). Interoperability in heterogenous medical information systems using smart mobile agents and HL7 (eMAGS). In Preliminary

report Proceedings of the 3rd HL7 International Affiliates Meeting (HL72002), Melbourne, Australia.

Theses

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