Lori L. Scarlatos

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RESEARCH INTERESTS

In all my research projects, my focus has been on how computers can help people to see, understand, and learn. This includes research on educational games and simulations; human-computer interaction, with an emphasis on tangible user interfaces and physical computing; computer graphics, including level-of-detail surface modeling and animation systems; information visualization; multimedia; and computer science education.

EDUCATION

1993 Ph.D., Computer Science, State University of New York at Stony Brook
Dissertation: "Spatial Data Representations for Rapid Visualization and Analysis"
Advisor: Theo Pavlidis, Distinguished Professor

1984 MS with Distinction, Computer Science, Pratt Institute

1982 BFA with Honors, Art & Design, Pratt Institute

HONORS & AWARDS

NSF CAREER grant (IIS-9984385) awarded to pursue research on Tangible Interfaces for Collaborative Learning Environments (TICLE).

USATEC/ARPA technology transfer contract (DACA76-94-C-0019) awarded to extend and apply my dissertation research on Adaptive Hierarchical Triangulation (AHT).

Long Island Software Award (LISA) nomination (1998) for the Pine Email web tutorial I developed with Art&Sol for Suffolk County Community College.

Grumman Masters Fellowship (1988) enabled me to work toward my Ph.D. while maintaining full-time status at Grumman Data Systems.

Project Sterling Citation for Excellence (1987) recognized my work on contracts and research in Grumman Data Systems' research department.

ACADEMIC POSITIONS

Stony Brook University

Associate Professor, Technology and Society, 2007 – Present

Associate Professor, affiliated with Computer Science (2008 – Present)
and the Consortium for Digital Arts, Culture, and Technology (2016 – Present)

Faculty Director, Information Technology Systems Undergraduate College, 2011 – 2022

Lecturer, Computer Science, 1993 - 1994

Brooklyn College, City University of New York

Associate Professor, Computer and Information Science, 2001 - 2007

Assistant Professor, Computer and Information Science, 2000 - 2001

Assistant Professor, CIS / Library / TV-Radio, 1997 - 1999

Graduate Center, City University of New York

Associate Professor, Computer Science, 2001 - 2007

Hampshire College

Lemelson Assistant Professor of Computer Science and Visual Media, School of Cognitive Science and Cultural Studies, 1994 - 1997

Pratt Institute

Visiting Instructor, Computer Science, 1984 - 1986

RESEARCH & INDUSTRY EXPERIENCE

Comsys Technical Services, contracting for Grumman Data Systems
Technical Lead, 1994 - 1995
Led research and development for the USATEC/ARPA contract (DACA76-94-C-0019) to extend and apply my dissertation research to the Advanced Distributed Simulations program.

Grumman Data Systems, Technology Department, Research & Development
Technical Specialist, 1992 - 1994
Senior Programmer/Analyst, 1986 - 1992
Researched and developed systems: terrain modeling for simulators, visualization, image analysis, spatio-temporal databases, and cartographic analysis.

Lecht Sciences, Inc.
Vice President, 1985 - 1986
Information Systems Specialist, 1984 - 1985
Designed, developed, and managed real-time animation systems and computer games for the early IBM PCs. Products included The Animation Studio (TAS, a.k.a. Genki), The Graphics Machine (TGM), and The Ultimate Holographer.

RESEARCH GRANTS

The i-STEAM Project: A gamified faculty development learnshop for enhancing inclusive teaching in STEM using transcultural rhetorical practices drawn from the arts and humanities, SUNY Innovative Instructional Technology Grant, effective dates July 2023 – June 2024, total amount $28,000. Co-PI.

SaTC: EDU: Collaborative: Collaborative: Curriculum to Broaden Participation in Cybersecurity for Middle School Teachers and Students (CyberMiSTS), National Science Foundation, award number 1821753, effective dates September 2018 – August 2021, total amount $199,131. PI.

EDU: Collaborative: Branching Interactive Graphic Stories for Cybersecurity Education (BIGSCE), National Science Foundation, award number DGE-1623150, effective dates September 2016 – August 2018, total amount $137,344. PI.

Scaling Up the SUNY Online Program in Electrical Engineering for Renewable Clean Energies, SUNY High-Needs Grant, effective dates September 2015 – June 2016, total amount $68,957. PI.

The STEM of Wheelchair Use, TALENT Grant, effective dates July 2014 – June 2015, total amount $6,000. PI.

Technologies for Interactive Cyber Security Awareness Training, Department of Homeland Security, effective dates May 2014 – October 2014, subcontract amount $32,097. Subcontractor.

Enviropedia: A Serious Game about Beverage Container Choices, SUNY Innovative Instructional Technology Grant, effective dates July 2012 – June 2013, total amount $60,000. PI.

I/UCRC: Center for Dynamic Data Analytics (CDDA), National Science Foundation, award number IIP-1069147, effective dates August 2009 – February 2017, total amount $291,000. Co-PI.

BPC-AE: Collaborative Research: Strengthening and Expanding the Empowering Leadership Alliance, National Science Foundation, award number CNS-0940507, effective dates February 2010 - February 2012, total amount $30,002. PI.

Intelligent Energy Choices, 2008 AERTC Seed Grant, 2008 - 2009, total amount $25,000. PI.

BPC-DP: Building a Bridge in Brooklyn, National Science Foundation, award number CNS-0540549, effective dates March 2006 - February 2009, total amount $500,000. PI 2006-2007.

MRI: Acquisition of CAVE for Experiments in the Creation of Collaborative Learning Environments, National Science Foundation award number CNS-0420996, effective dates September 2004 -August 2007, total amount $577,284. PI.

CRCD: Innovative Approaches to Computer-Human Interfaces, National Science Foundation award number EIA-0203333, effective dates August 2002 -July 2005, total amount $491,309. $21,000 Research Experiences for Teachers supplement awarded for July 2005 - February 2006. PI.

CAREER: Tangible Interfaces for Collaborative Learning Environments, National Science Foundation award number IIS-9984385, effective dates July 2000 - June 2005, total amount $498,869. PI.

POWRE: Smart Object Interfaces for Collaborative Learning Environments, National Science Foundation award number CDA-9720470, effective dates January 1998 - June 1999, total amount $20,275. PI.

Puzzle Maker: a System for Developing Tangible Interfaces for Physical Puzzles, PSC-CUNY-33 research award, effective dates July 2002 - June 2003, $3352. PI.

Tracking 3D Objects In Tangible Interfaces, PSC-CUNY-31 research award, effective dates July 2000 - June 2001, $2747. PI.

Adaptive Surface Models for Real Time 3D Applications, PSC-CUNY-29 research award, effective dates July 1998 - June 1999, $4186. PI.

EDUCATIONAL GRANTS AND AWARDS

STEM Tech, Motorola Solutions Innovation Generation grants, September 2011 – July 2015, total $250,000. Provide introduction to computer science concepts for economically disadvantaged middle-school girls in a Saturday program and Summer camp.

TechPrep, Motorola Innovation Generation grants, September 2008 – August 2011, total $150,000. Senior Personnel. Developing and delivering learning materials in Saturday and Summer programs, introducing under-privileged middle-school girls to Information Technology.

Broadening Diversity Frontiers in Science and Engineering, SUNY Office of Diversity and Educational Equity, June 2011 – May 2012, total $10,000. Co-PI. Teaching female high-school students to program educational games using AppInventor.

Learning with Puzzles with Tangible Interfaces, CREW (Collaborative Research Experience for Women in Undergraduate Computer Science and Engineering) grant sponsored by CRA-W and NSF, September 2002 - June 2003, $3000 (supporting 3 undergraduate students). PI.

Computer Guides in Collaborative Learning Environments, CREW grant, September 2000 - June 2001, $3000 (supporting 3 undergraduate students). PI.

Mathematical Puzzles with Smart Object Interfaces, CREW grant, September 1998 - June 1999, $2000 (supporting 2 undergraduate students). PI.

The Learning Café, Department of Education (TIIAP) grant. $650,000. Senior Personnel.
CORE 5 Introduction to Mathematical Reasoning and Computer Science, Department of Education (FIPSE) grant. Senior Personnel.

TEACHING AND CURRICULUM DEVELOPMENT

Stony Brook University Program and Course Development:

Technology, Policy, and Innovation (TPI), Ph.D. program in the Department of Technology and Society. I participated in defining the goals, requirements, and courses for this new program.

Educational Technology (ET), concentration for the Masters degree in Technology Systems Management in the Department of Technology and Society. I helped to redefine the course sequence and course content for this program.

Center for Cognitive Studies, member of planning committee. I am helping to define courses and identify research topics for this interdisciplinary group on Stony Brook campus.

EST 579 Educational Games (graduate)

EST 578 Human-Computer Interaction Design for Instruction (graduate)

EST 570 Design of Courseware (graduate, redefined)

EST 310 / ISE 340 Design of Computer Games (undergraduate)

EST 207 Interaction Design (undergraduate)

ITS 102 Freshman Seminar (varying topics)

Stony Brook University Courses Taught:
EST 590 Seminar for MS/TSM Students (graduate)

EST 579 Educational Games (graduate)

EST 578 Human-Computer Interaction Design for Instruction (graduate)

EST 574 Distance Education (graduate)

EST 573 Multimedia Courseware (graduate)

EST 570 Design of Courseware (graduate)

EST 565 Instructional Technologies (graduate)

EST 440 Interdisciplinary Research Methods (undergraduate)

EST 310 / ISE 340 Design of Computer Games (undergraduate)

EST 323 / CSE 323 Computer-Human Interaction (undergraduate)

EST 207 Interaction Design (undergraduate)

EST 205 Introduction to Technology Design (undergraduate)

CSE 364 Advanced Multimedia (undergraduate)

HON 111 (honors college seminar)

ITS 102 (undergraduate college seminar)

Brooklyn College Program and Course Development:

Performance and Interactive Media Arts (PIMA), graduate certificate program (approved). As a founding member and the sole representative of the CIS department in this inter-departmental program (with Art, Music, Theater, Film, and TV/Radio), I developed curricula and served on the search committee for the program chair.

Multimedia Computing (MMC), undergraduate major program (approved). I lead the proposal development effort for this new program. I was also instrumental in developing this major, which includes classes that I introduced and teach.

Multimedia Concentration, graduate (approved). For the first few years that this was in place, I taught all of the courses in this popular concentration. Additional faculty now share the load.

CIS 54.1 Game Programming

CIS 54 Innovative Approaches to Computer Human Interaction

CIS 45.1 Multimedia Databases

CIS 3.1 Multimedia Production for the World Wide Web

CHC 3 Science and Technology in New York City (co-developed, for CUNY Honors College)

PIMA 701 Sound, Image, Space, and Performance: Interactive Media Programming I

(co-developed, for certificate program in Performance and Interactive Media Arts)

PIMA 702 Artistic Process and Contemporary Community: Interactive Media Programming II

(co-developed, for certificate program in Performance and Interactive Media Arts)

Computer Science Courses Taught:
CIS 752 Multimedia Presentations (graduate)

CIS 751 Multimedia Systems (graduate)

CIS 741.1 Computer Graphics Algorithms (graduate)

CIS 741 Computer Graphics (graduate)

CIS 54.1 Game Programming (undergraduate)

CIS 54 Innovative Approaches to Computer Human Interaction (undergraduate)

CIS 45.1 Multimedia Databases (undergraduate)

CIS 41 Computer Graphics (undergraduate)

CIS 3.1 Multimedia Production for the World Wide Web (undergraduate)

CIS 3 The Internet (undergraduate)

CIS 2.50 Unix Shell Programming (undergraduate)

CORE 5.1 Introduction to Computer Science

CORE 5 Introduction to Mathematical Reasoning and Computer Science

Interdisciplinary Courses Taught:

CHC 3 Science and Technology in New York City – computer-based research and data visualization (using GIS) focusing on environmental issues in New York City, co-taught with an environmental physicist.

PIMA 701 Sound, Image, Space, and Performance: Interactive Media Programming I – included programming principles for non-programmers, co-taught with an electronic musician and a digital artist.

EDUC 713.25T Methodology in Childhood Science and Environmental Teaching and Learning II – I guest-lecture and work with students on group projects implementing educational applications with innovative interfaces.

TVR 20 Sight/Sound/Motion: Basic Production Theories and Techniques – guest-lectures on multimedia applications.

PhD Students:

Landy, Shalva S. (graduated 2015)

Mbogho, Audrey (graduated 2006)

Perkowski, Justine (graduated 2019)

Pratama, Ahmad (graduated 2019)

Jonathan Sypeck

Tchoubar, Tatiana (graduated 2018)

Telendii, Nataliia (graduated 2023)

Masters Projects:

Ryan Schwabe (2022)

Dylan Singh (2021)

Courtney, Ryan (2019)

Mary Taibi (2018)
Johanna Appel (2018)
Phillip Caputo (2016)
Abigail Cooke (2015)
Mike Spikes (2014)
Sara Kardasz (2013)
Alice Wong (2012)
Patrick Rogin (2012)
John Thoms (2012)
Scott Halford(2012)
Jessica Ragazzi (2011)
Wayne Jensen (2011)
Meiyu Ke (2011)
Kathleen Fitzpatrick (2011)
Teresa Noto (2010)
Lindsay Dolezal (2010)
Noah Fisch (2010)
Ray DiVenuto (2010)
Michael Czachor (2010)
Renee Warish (2010)
Bredes, Bonnie (2009)
Cullinan, Kathleen (2009)
Heberer, Donald (2009)
Phillips, Stephen (2009)
Vanek, Brian (2009)
Li, Ssu-Chieh (2007)
Friedman, Rebecca (2006)
Idromenos, Sophie (2005)
Geverolla, Marylou (2005)
Trzeciak, Piotr (2004)
Qureshi, Saira (2002)

Honors College Senior Project Advisor:
Safa Sattar (2016)
Elizabeth Crowe (2015)
Connor Duffy (2014)

I also have regularly advised 2-4 undergraduate students each semester, working on independent research and development projects.

PROFESSIONAL ACTIVITIES AND SERVICE

External Service:

Co-Editor for the Journal of Educational Technology Systems, 2008 - present.

Member of editorial board, Journal of Mobile and Blended Learning, 2008 - present.

Participant in Creating a Climate for Interdisciplinary Computing, NSF-sponsored workshop, April 2011.

Regular review panelist for the National Science Foundation, 1996 - present.

Reviewer for PSC-CUNY grants, 2009-2010.

Reviewer for Grace Hopper Conference Travel Scholarship, 2009 & 2010.

Papers Chair for 2008 CCSC Eastern Conference, 2008.

Paper reviews for ACM SIGCHI, IBM Systems Journal, ACM SIGGRAPH, CVGIP: Graphical Models and Image Processing, IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Computer, International Journal of Geographic Information Systems, Addison-Wesley, CCSC, Computers and Education.

Session Chair at 2008 CCSC Eastern Conference, 2007 CCSC Eastern Conference and 1993 ACSM/ASPRS Annual Convention & Exposition.

Learning for Life, Hauppauge High School, guest speaker, 2009 & 2010.

Workshop for Girl Scouts' "IMAGINE YOUR POSSIBILITIES" STEM Conference at Hofstra University, 10/01/2016.

Advised team of 3 high school girls (Team "Groovy Girls") from Commack High School for 2015 Technovation competition.

Stony Brook University Committees (current marked with *):

*CEAS Personnel Policy Committee, Technology and Society representative

CEAS Dean's search committee, member

CEAS Awards Committee, Technology and Society representative

Senate Administrative Review Committee (ARC), member

Provost's Committee on Massive Open Online Courses (MOOC), representative

Undergraduate Colleges' Committee on UGC Placement, representative

Provost's Strategic Advisory Committee, Technology and Society representative

Teaching and Learning Senate Committee, Technology and Society representative

Teaching and Learning Technologies advisory board member

*Technology and Society Graduate Curriculum Committee, member

*Technology and Society Undergraduate Curriculum Committee, member

*Technology and Society, point person for current and prospective students seeking advice on Educational Technology concentration

Professional Memberships:

ACM, SIGGRAPH, SIGCHI

JOURNAL PUBLICATIONS

Pratama, A. R., & Scarlatos, L. L. (2020). The roles of device ownership and infrastructure in promoting E-learning and M-learning in Indonesia. *International Journal of Mobile and Blended Learning (IJMBL)*, *12*(4), 1-16.

Harwayne-Gidansky, I., Balmer, D.F., Doughty, C.B., Scarlatos, L.L., Chang, T., & Song, J.L. (2020). Practicing CPR: A Qualitative Analysis of Resident Motivation. *Simulation & Gaming*, 51(4).

Scarlatos, L., Engoron, E., Block, P. & Evans, C. (2019). All Together Now: A Collaborative Game to Increase Advocacy Among Disabled Individuals. *International Journal of Mobile and Blended Learning (IJMBL),* 11(4), 32-41.

Pratama, A.R. & Scarlatos, L.L. (2019). Ownership and Use of Mobile Devices Among Adolescents in Indonesia. Journal of Educational Technology Systems, 48(3), 356-384.

Scarlatos, L. & Scarlatos, T. (2018). Fostering Teamwork with an Online Idea Stock Exchange, Journal of Computing Sciences in Colleges, vol. 33, no. 6, June 2018, pp. 107-113.

Hyang-gi Song, Michael Restivo, Arnout van de Rijt, Lori Scarlatos, David Tonjes, Alex Orlov (2015). The hidden gender effect in online collaboration: An experimental study of team performance under anonymity, Computers in Human Behavior, Volume 50, September 2015, Pages 274-282. Available online at http://dx.doi.org/10.1016/j.chb.2015.04.013.

Lori L. Scarlatos, Micha Tomkiewicz, Ryan Courtney (2013). Using an Agent-Based Modeling Simulation and Game to Teach Socio-Scientific Topics, Interaction Design and Architecture(s) Journal – IxD&A, N. 19, Winter 2013/2014, pp. 77 – 90. Available online at http://www.mifav.uniroma2.it/inevent/events/idea2010/doc/19_6.pdf.

Scarlatos, L.L., Nti, K. and Wong, A. (2013). Detecting data visualization preferences using games, Emerging Technologies for a Smarter World (CEWIT), 2013 10th International Conference and Expo on, IEEE Xplore, pp.1-5, 21-22 Oct. 2013.

M. Tomkiewicz and L.L. Scarlatos (2012). Bottom-up Mitigation of Global Climate Change, The International Journal of Climate Change: Impacts and Responses, Volume 4, Issue 1, pp.37-48.

Scarlatos, L.L. and Scarlatos, T. (2008). Teacher Directed Active Learning Games, Journal of Educational Technology Systems, 37(1), summer 2008, 3-18.

L. Scarlatos, S. Lowes, E. Sklar, S. Chopra, S. Parson, I. Rudowsky and H. Holder (2008). Building Bridges: The 2006 Summer Institute, The Journal of Computing Sciences in Colleges, 23 (3), January 2008, pp. 23-30.

L.L. Scarlatos (2006). Tangible Math, International Journal of Interactive Technology and Smart Education, vol 3, no. 4, November 2006, 293-309.

L. Scarlatos and T. Scarlatos (2005). Physical Computing and Multimodal Input in Human Computer Interfaces. Journal of Computing Sciences in Colleges, 20(5), 8-14.

L.L. Scarlatos (2002). TICLE: Using Multimedia Multimodal Guidance to Enhance Learning, Information Sciences 140 (2002), pp. 85-103.

M. Deutch, B. Evans, L. Scarlatos (2001). A Distance Education Collaboration: The Learning Cafe Experience, Online Journal of Distance Learning Administration, vol. 4, no. 1 (Spring 2001), http://www.westga.edu/~distance/ojdla/spring41/deutch41.html.

L.L. Scarlatos (2000). The Learning Cafe: Preparing Inner-City High School Students For College, The Journal of Computing in Small Colleges, 15 (5), May 2000, pp. 61-68.

L. Scarlatos and T. Pavlidis (1992). Hierarchical Triangulation Using Cartographic Coherence, CVGIP: Graphical Models and Image Processing, 54 (2), March 1992, pp. 147-161.

REFEREED CONFERENCE PUBLICATIONS

Buchanan, L., Scarlatos, L., Telendii, N. (2021). Curriculum to Broaden Participation in Cybersecurity for Middle School Teachers and Students. In *2021 IEEE Integrated STEM Education Conference (ISEC)*, 63-70.

Scarlatos, L. L. & Courtney, R. (2020). Container Chaos: The Impact of a Casual Game on Learning and Behavior. International Conference on Game-Based Learning and Serious Games (ICGBLSG 2020), Boston, April 2020.

Tchoubar, T., Scarlatos, L.L., & Sexton, T. (2018). Role of Digital Fluency and Spatial Ability in Student Experience of Online Learning Environments, 2018 Computing Conference (SAI 2018, AISC 857), 2018.

Scarlatos, L. L., Pratama, A., & Tchoubar, T. (2017). The Virtual Breadboard: Helping Students to Learn Electrical Engineering at a Distance. Future Technologies Proceedings, Vancouver, Canada. Available online at https://saiconference.com/Downloads/FTC2017/Proceedings/85_Paper_272-The_Virtual_Breadboard_Helping_Students.pdf

Courtney, R. & Scarlatos, L. L. (2015). Mind Reader: Designing for More Intimate Social Play in Video Games. In Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (pp. 1211-1216). ACM.

Issapour, M., Scarlatos, L.L. and Lewis, H.F. (2011) A Statistical Model for Energy Intensity, Proceedings of the International Symposium on Models and Modeling Methodologies in Science and Engineering (MMMse 2011), Mar. 27-30 2011, Orlando, FL.

Scarlatos, L.L. and Scarlatos, T. (2010) Visualizations for the Assessment of Learning in Computer Games, presented at 7th International Conference & Expo on Emerging Technologies for a Smarter World (CEWIT 2010), Sept. 27-29 2010, Incheon, Korea.

L.L. Scarlatos, M. Tomkiewicz, A. Bulchandani, K.A. Srinaivasan and P. Naik (2009). Intelligent Energy Choices, Proceedings of the 20th IASTED International Conference on Modeling and Simulation (MS 2009), Banff, Alberta, Canada, July 2009, track 670-075.

A.J.W. Mbogho and L.L. Scarlatos (2007). Genetic parameter tuning for reliable segmentation of colored visual tags, Proceedings of the 9th annual conference on Genetic and evolutionary computation, 1525.

A. Mbogho , L. Scarlatos, M. Jaworska (2006). Teaching with Tangibles: A Tool for Defining Dichotomous Sorting Activities. Proceedings of ACM CHI-SA 2006 (5th Southern African Conference on Human-Computer Interaction), January 2006, p. 59-64.

A. Mbogho and L. Scarlatos (2005). Towards Reliable Computer Vision-Based Tangible User Interfaces. Proceedings of IASTED-HCI 2005 (Human Computer Interaction), Phoenix, AZ, November 2005.

L. Scarlatos, A. Bruckman, A. Druin, M. Eisenberg, O. Zuckerman (2005). Connecting with Kids: So What's New? Extended Abstracts of ACM CHI2005, Portland, OR, April 2005, pp. 1172 - 1173. I proposed, organized, and chaired this panel presentation.

T. Scarlatos, L. Scarlatos, and F. Gallarotti (2003). iSign: Making the Benefits of Reading Aloud Accessible to Families with Deaf Children. In Proceedings of the Sixth IASTED International Conference on Computer Graphics and Imaging, 74-78.

L.L. Scarlatos (2002). An Application of Tangible Interfaces in Collaborative Learning Environments, SIGGRAPH 2002 Conference Abstracts and Applications, 125-126.

L. Scarlatos, S. Landy and S. Qureshi (2002). Tracking 3D Puzzle Pieces for Collaborative Learning Environments, SIGGRAPH 2002 Conference Abstracts and Applications, 270.

L.L. Scarlatos and S.S. Landy (2001). Experiments in Using Tangible Interfaces to Enhance Collaborative Learning Experiences, CHI 2001 Extended Abstracts, Conference on Human Factors in Computer Systems, March 31 - April 5, 2001, pp. 257-258.

L.L. Scarlatos, Y. Dushkina, S. Landy (1999). TICLE: A Tangible Interface For Collaborative Learning Environments, CHI 99 Extended Abstracts, pp. 260-261.

L.L. Scarlatos (1999). Puzzle Piece Topology: Detecting Arrangements in Smart Object Interfaces, Proceedings of the 7th International Conference in Central Europe on Computer Graphics, Visualization and Interactive Digital Media '99, pp. 456-462.

L. Scarlatos, R. Darken, K. Harada, C. Heeter, R. Muller, B. Shneiderman (1997). Designing Interactive Multimedia, Proceedings of ACM Multimedia '97, Seattle, WA, Nov. 1997, pp. 215-218. I proposed, organized, and chaired this panel presentation.

E. Bernstein and L. Scarlatos (1996). Wavelets for Multidimensional Terrain Modeling, IEEE IMDSP Workshop Proceedings, Belize City, Belize, March 1996, pp. 86-87.

L.L. Scarlatos and T. Pavlidis (1993). Techniques for Merging Raster and Vector Features with 3D Terrain Models in Real Time, 1993 ACSM/ASPRS Annual Convention & Exposition Technical Papers, Volume 1, New Orleans, LA, February 1993, pp. 372-381.

L.L. Scarlatos and T. Pavlidis (1993). "Real Time Manipulation of 3D Terrain Models", 1993 ACSM/ASPRS Annual Convention & Exposition Technical Papers, Volume 3, New Orleans, LA, February 1993, pp. 331-339.

L. Scarlatos and T. Pavlidis (1992). Optimizing Triangulations By Curvature Equalization, Proceedings of Visualization '92, Boston, MA, October 1992, pp. 333-339.

L. Scarlatos and T. Pavlidis (1991). Adaptive Hierarchical Triangulation, Proceedings of Auto-Carto 10, Baltimore, MD, March 1991, pp. 234-246.

L. Scarlatos and T. Pavlidis (1990). Hierarchical Triangulation Using Terrain Features, Proceedings of Visualization '90, San Francisco, CA, October 1990, pp. 168-175.

L.L. Scarlatos (1990). A Refined Triangulation Hierarchy for Multiple Levels of Terrain Detail, Proceedings of IMAGE V Conference, Phoenix, AZ, June 1990, pp. 115-122.

L.L. Scarlatos (1990). An Automated Critical Line Detector for Digital Elevation Matrices, Technical Papers of 1990 ACSM-ASPRS Annual Convention, Volume 2, Denver, CO, March 1990, pp. 43-52.

L.L. Scarlatos (1989). A Compact Terrain Model Based On Critical Topographic Features, Proceedings of Auto Carto 9, Baltimore, MD, April 1989, pp. 146-155.

L.L. Scarlatos (1989). Adaptive Terrain Models for Real-Time Simulation, Proceedings of the Digital Electronic Terrain Board Symposium, Wichita, KS, October 1989, pp. 219-229.

TECHNICAL REPORTS

L. Scarlatos and R. Friedman (2007). On Developing User Interfaces for Children in Educational Virtual Reality Environments, CUNY Graduate Center Technical Report TR-2007001.

L.L. Scarlatos, S.S. Landy, J. Breban, R. Horowitz, and C. Sandberg (2002). On the Effectiveness of Tangible Interfaces in Collaborative Learning Environments, CUNY Graduate Center Technical Report TR-200204.

L.L. Scarlatos, S.S. Landy, S. Qureshi (2002). Ubiquitous Puzzle Pieces: 3D Tangible Interfaces for Collaborative Learning Environments, CUNY Graduate Center Technical Report TR-200207.

L. Scarlatos (1998). Tracking Puzzle Pieces for a Smart Objects Interface, Brooklyn College Computer Science Technical Report 1-98.

INVITED PAPERS AND PRESENTATIONS

Lori Scarlatos, Making It Real: Using Technology to Create Meaningful Learning Experiences, presented at SBU Teaching and Learning Colloquium, March 2019.

L. Scarlatos, Social Media, presented to Family Engagement Advisory Council - Westbury School District at Westbury Memorial Public Library, 03/14/2018.

Lori Scarlatos, Toward a Framework for Gamifying Agent-Based Simulations, International Academic Conference on Meaningful Play, East Lansing, MI, October 2014.

Lori Scarlatos, Alexander Orlof, Arnout van de Rijt, David Tonjes, Michael Restivo, Kwame Nti, Mindy Mosher, Noerah Alvi, Enviropedia: A Serious Game about Beverage Container Choices, presented at SUNY Conference on Instruction and Technology, May 2013.

Lori Scarlatos, Alexander Orlof, Arnout van de Rijt, David Tonjes, Michael Restivo, Kwame Nti, Mindy Mosher, Noerah Alvi, Enviropedia: A Serious Game about Beverage Container Choices, presented at SUNY SPARK Conference, April 2013.

L. Scarlatos and M. Tomkiewicz (2009). Energy Choices: Visualizations for Education and Outreach, Poster Paper presented at the CEWIT International Conference on Wireless & Information Technology, Islandia, NY, October 2009.

T. Scarlatos and L. Scarlatos (2008). SpaceSafari – Bringing Arcade Game Excitement to Learning About the Solar System, Poster Paper presented at the CEWIT Commercialization Conference, Stony Brook, NY, October 2008.

T. Scarlatos and L. Scarlatos (2007). The Future of Educational Multimedia Software Games, Technology Demonstration presented at the CEWIT Commercialization Conference, Stony Brook, NY, October 2007.

D. Roces, T. Scarlatos and L. Scarlatos (2007). Creating Powerful Connections: Eastern Suffolk BOCES and Stony Brook University, presented at the 2nd Annual Celebration of Teaching and Learning, New York, NY, March 2007.

L. Scarlatos and E. Miele (2005). Tangible User Interfaces for Collaborative Learning in Science Education Applications, presented at National Science Teachers Association (NSTA) Eastern Area Conference, Hartford, CT, October 2005.

T. Scarlatos and L. Scarlatos, educational applications with innovative interfaces presented at Eastern Suffolk BOCES' Celebration of Technology in Education (CTE), 2005, 2006, 2007, 2008, 2009, 2010, and 2011.

L. Scarlatos, A. Mbogho and M. Jaworska (2004). “Teaching with Tangibles: A Tool for Defining Dichotomous Sorting Activities”. Poster presentation at UIST 2004, the Seventeenth Annual ACM Symposium on User Interface Software and Technology, Santa Fe, NM, October 2004.

L. Scarlatos, T. Scarlatos (1999). The Learning Café: Thought For Food, Syllabus ’99, CA, July 1999.

L.L. Scarlatos (1994). Adaptive Modeling Techniques, presented at Influences 7 Symposium, Marshall University, Huntington, WV, March 1994.

P.R. Keller and M.M. Keller (1993). Visual Cues, IEEE Computer Society Press, Los Alamitos, CA, 1993, p. 140. Invited contribution.

L.L. Scarlatos (1993). Combining Spatial Data Representations for Rapid Visualization and Analysis, presented at ARO/MSI Computational Geometry Workshop, Raleigh, NC, October 1993.

Work featured in "Micros get animated", High Technology, May 1986, p. 67, and "Inside a Software Thinktank", Computer Update, July 1986, pp. 16-21.