Curriculum Vitae

Francis T. Marchese

Pace University
Seidenberg School of Computer Science and Information Systems
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ACADEMIC POSITIONS

Professor, Computer Science Department, Pace University, 1989 - present.

Associate Professor, Computer Science Department, Pace University, 1986 - 1989.

Assistant Professor, Computer Science Department, Pace University, 1983 - 1986.

Adjunct Assistant Professor, Astronomy, Borough of Manhattan Community College, 1981 - 1983.

Adjunct Assistant Professor, Physical Chemistry and Nursing Chemistry Laboratories, Hunter College of CUNY, 1979 to 1981.

Instructor, Introduction to Chemistry (Lecture), University of Cincinnati, summer 1977.

Instructor, Physical Chemistry Laboratory, University of Cincinnati, 1976 - 1977.

Instructor, Computational Methods, University of Cincinnati, 1976.

Graduate Lecturer, Chemistry Department, University of Cincinnati, 1976.

Graduate Teaching Assistant, Chemistry Department, University of Cincinnati, 1973 - 1977

Graduate Teaching Assistant, Chemistry Department, Youngstown State University, 1971 - 1973

EDUCATION AND TRAINING

Postdoctoral Research, Theoretical Chemistry
Chemistry Department, Hunter College of CUNY, NY, 1978 - 1983
Advisor: David L. Beveridge
Research Area: Quantum and statistical mechanical studies of liquids and aqueous solutions.

Ph.D., Theoretical Chemistry
University of Cincinnati, OH, June 1979
Advisor: Hans H. Jaffé
Dissertation: CNDO/S Studies of Molecular Polarizabilities and Two-Photon Absorptivities

M.S., Chemistry
Youngstown State University, OH, June 1973
Advisor: Janet E. Del Bene
Thesis: A Comparative Analysis of the Hydrogen Bond in Dimers Containing Substituted Carbonyl Compounds

B.S., Natural Science
Niagara University, NY, June 1971

ADMINISTRATIVE POSITIONS

Center for Advanced Media (CAM), Founder and Director, 2001 to 2013.

Fostered basic and applied interdisciplinary research collaborations among Pace University faculty. CAM researchers have been awarded nearly $600,000 in grants and published widely in fields such as information visualization, virtual reality, collaborative computing, pervasive computing, medical image representation and understanding, handwriting analysis and forgery detection, voice transmission, voice recognition, language detection, wearable computers, multimedia information retrieval, collaborative group dynamics, and e-business.

Pace Digital Gallery, Founder and co-Director, 2003 to present (http://csis.pace.edu/digitalgallery/).

A collaboration between Pace's Computing School and the Department of Fine Arts, the gallery has a permanent, exhibition space located in the lobby-atrium of 163 William Street in Lower Manhattan and a Web presence. The Pace Digital Gallery has exhibited works by leading digital and video artists, and regularly hosts an artist lecture series that presents world renowned digital artists. In all, the Pace Digital Gallery has exhibited the works of nearly 120 internationally recognized artists and published a dozen catalogs and brochures documenting this work.

Exhibitions, symposia, performances, and gallery talks produced as co-director

- Apr. 16 - May 3, 2013 *Turbulence@PaceDigitalGallery3*: *Woodear*, exhibition
- Nov. 26 - Dec. 20, 2012 *Flow*, exhibition
- Apr. 10 - May 8, 2012 *Great Outdoors!*, exhibition
- Feb. 28 – Mar. 30, 2012 *Codings*, exhibition
- Nov. 8 – Dec. 2, 2011 Lee Arnold and Jonathan Ehrenberg, exhibition
- Oct. 4 – Oct. 28, 2011 Lovid and Jill Magid, exhibition
- Apr. 5 – Apr. 29, 2011 *Turbulence@PaceDigitalGallery2*, exhibition
- Feb. 8, 2011 Lovid and Jill Magid, evening art talks
- Nov. 9 - Dec. 3, 2010 *Me, My camera, and I*, exhibition
- Sep. 21 – Oct. 22, 2010 *David Crawford: Retrospective*, exhibition
- Apr. 6 - May 7, 2010 *Map Marking*, exhibition
- Nov. 17 - Dec. 18, 2009 *Inner Lives*, exhibition
- Oct. 20 – Nov. 13, 2009 *Digital Marginalia*, exhibition
- Apr. 7 - May 1, 2009 *Turbulence@Pace Digital Gallery*, exhibition
- May 10 – May 27, 2009 *Juried Student Show*, student exhibition
- Feb. 10 – Mar. 3, 2009 *The Aesthetics of Gaming*, exhibition
- Nov. 13 – Dec. 4, 2008 David Clark and Michelle Gay, exhibition
- Oct. 16 – Nov. 6, 2008 Brooke Singer and Ricardo Miranda Zúñiga, exhibition
- Sep. 18 – Oct. 8, 2008 Kelly Richardson and Mark Napier, exhibition
- Apr. 11, 2008 *Programmable Media 2*, symposium
- Mar. 5 – Mar. 28, 2008 *American Dreams*, exhibition
- Nov. 13 – Dec. 14 2007 *Teleculture*, exhibition
- Fall 2007 Marina Zurkow and Joe Mckay, evening art talks
- Apr. 2007 *Juried Student Show*, student exhibition
- May 2, 2007 *Programmable Media*, symposium
- Feb 1 - Feb 24, 2007 *Digiscape*, exhibition
- Nov. 15 – Dec. 8, 2006 *Wwassup, tYgEr_lil_E?*, pall Thayer, exhibition
- Oct. 2 – Oct. 27, 2006 *Satellite Valencia*, exhibition
- Apr. 2006 *Juried Student Show*, student exhibition
- Spring 2006 Marcin Ramocki and Luke Murphy, evening art talks

- Mar. 2 – Mar. 30, 2006 *12th gate, Reflected*. Luke Murphy, exhibition
- Fall 2005 Camille Utterback and John Klima, Jonah Brucker-Cohen and Art Clay, Natalie Jeremijenko and Paul Benjamin, evening art talks
- Nov. – Dec. 2005 *Synthesis and Distribution*, exhibition
- Oct. – Nov. 2005 *Trigger*. Jody Zellen, exhibition
- Spring 2005 Paul Johnson, Yael Kanarek and Marek Walczak, Jody Zellen and Johan Kotlinski, Mary Flanagan and Kristin Lucas, evening art talks
- Apr. – Jun. 2005 *Urbanisms*, exhibition
- Mar. 2005 *Juried Student Show*, student exhibition
- Fall 2004 Jose Carlos Casado and Michael Mandiberg, John Gerrard and Yucef Merhi, Cory Archangel, Andrea Polli and Annette Weintraub, evening art talks
- Oct. 2004 Peter Horvath, exhibition
- May – Sep. 2004 *ebay: Buy or Sell or Buy*, exhibition
- Dec. 2003 *Screen Kiss*, exhibition
- Oct 2003 *Accélerateur*, performance
- Apr. - May 2003 *Digital Downtown*, exhibition

Catalogs and Brochures Produced as co-director

- F.T. Marchese (Curator). 2012. *Flow*, Catalog, Pace Digital Gallery (November). Pace University, NY.
- J. Mcdonald (Curator). 2012. *Great Outdoors!,* Catalog, Pace Digital Gallery (April), Pace University, NY.
- N. Montfort (Curator). 2012. *Codings*, Catalog, Pace Digital Gallery (February), Pace University, NY.
- J. Mcdonald (Curator). 2010. *Me, My Camera, and I*, Catalog, Pace Digital Gallery (November), Pace University, NY.
- J-A Greene, H. Thorington, J. McDonald, and F.T. Marchese (Curators). 2010. *.David Crawford: Retrospective,* Catalog, Pace Digital Gallery (September). Pace University, NY.
- F.T. Marchese (Curator). 2010. *Map Marking,* Catalog, Pace Digital Gallery (April). Pace University, NY.
- F.T. Marchese (Curator). 2009. *Digital Marginalia: Annotation, Illumination, Appropriation,* Catalog, Pace Digital Gallery (October). Pace University, NY.
- M. Kasprzak (Curator). 2009**.** *The Aesthetics of Gaming,* Brochure, Pace Digital Gallery (February), Pace University, NY.
- J. Mcdonald (Curator). 2008. *American Dreams*, Brochure, Pace Digital Gallery (October), Pace University, NY.
- C. Blue (Curator). 2007. *Digiscape: Unexplored Terrain*, Catalog, Pace Digital Gallery (February). Pace University, NY.
- L. Wells (Curator). 2007. *TELECULTURE*, Catalog, Pace Digital Gallery (November), Pace University, NY.
- J. Mcdonald (Curator). 2006. *Satellite Valencia*, Brochure, Pace Digital Gallery (October), Pace University, NY.
- J. Zellen. 2005. *Trigger*, Catalog, Pace Digital Gallery (October), Pace University, NY.
- Weintraub (Curator). 2005. *Urbanisms*, Catalog, Pace Digital Gallery (April), Pace University, NY.
- J. Mcdonald (Curator). 2004. *Ebay: Buy or Sell or Buy*, Catalog, Pace Digital Gallery (May), Pace University, NY.

AWARDS and HONORS

Faculty Scholar, Pace Academy for Applied Environmental Studies, 2012 – 2013.

Faculty Fellow, Helene & Grant Wilson Center for Social Entrepreneurship, 2011- 2012**.**

Visiting Scholar, Steinhardt School of Culture, Education, and Human Development, New York University, Fall 2010.

Visiting Scholar, Institute of Fine Arts, New York University, Spring 2009, Fall 2009, Spring 2010.

Faculty Award for Distinguished Service, Pace University, December 2008.

Excellence in Research Award, Pace University, School of Computer Science and Information System, Recipient 2002, 1996.

Kenan Award for Outstanding Teaching, Pace University, Recipient 1992.

Carnegie Foundation Excellence in Teaching Award, Nominee, 1992, 1993.

SERVICE

Professional Service

Editorial and Advisory Boards

Associate Editor, *ACM Journal of Computing and Cultural Heritage* (JOCCH), (2012 – 2015).

Educator Advisory Board, Kno, Inc (2011 – 2013).

Associate Editor, *The International Journal of the Book*, Vol. 6, 2008.

Conference Committees

2014, Program Committee: IEEE VIS 2014 Arts Program, (November 9th-14th, Paris, France).

2014, Organizing Committee (Publications Chair): Information Visualization 2014 (IV '14) Conference, (July, Paris, France).

2014, Symposium Co-chair: International Symposium on Visualization, Art, and Design, (July, Paris, France).

2014, Symposium Co-chair: International Symposium on Digital Humanities Knowledge Visualization, (July, Paris, France).

2013, Organizer and Chair: Pace Digital Gallery Symposium on Digital Art and the Urban Environment (Oct. 4, 2013, Pace University, NY)

2013, Organizing Committee (Publications Chair): Information Visualization 2013 (IV '13) Conference, (July, London, UK).

2013, Symposium Co-chair: International Symposium on Visualization, Art, and Design, (July, London, UK).

2013, Symposium Co-chair: International Symposium on Digital Humanities Knowledge Visualization, (July, London, UK).

2012, Organizing Committee (Publications Chair): Information Visualization 2012 (IV '12) Conference, (July, Montpellier, France).

2012, Symposium Co-chair: International Symposium on Visualization, Art, and Design, (July, Montpellier, France).

2012, Symposium Co-chair: International Symposium on Digital Humanities Knowledge Visualization, (July, Montpellier, France).

2011, Organizing Committee: Information Visualization 2011 (IV '11) Conference, (July, London, UK).

2011, Symposium Co-chair: International Symposium on the Intersection of Visualization, Art, and Design, ARTSCI, (July, London, UK).

2011, Symposium Chair: Fourth International Symposium on Visualization in Software Engineering, SEVIZ, (July, London, UK).

2010, Conference Chair: Information Visualization 2010 (IV'10) Conference, (London, UK).

2010, Symposium Co-Chair: Third International Symposium on Visualization in Software Engineering, SEVIZ, (July, London, UK).

2010, Program Committee: Workshop on Interactive Data Exploration and Knowledge at the International Working Conference on Advanced Visual Interfaces (AVI 2010) (May, Rome, Italy)

2010, Program Committee: Fifth International Workshop on Requirements Engineering Visualization (REV'10) (September, Sydney, Australia)

2009, Program Committee: Fourth International Workshop on Requirements Engineering Visualization (REV'09) (August, Atlanta, Georgia)

2009, Program Committee: 2009 Visual Information Communications International (VINCI'09), (Sydney).

2009, Organizing Committee: Information Visualization 2009 (IV '09) Conference, (Barcelona).

2009, Symposium Co-Chair: Second International Symposium on Visualization in Software Engineering, SEVIZ, (Barcelona).

2008, Organizing Committee: Information Visualization (IV '08) Conference (London).

2008, Symposium Co-Chair: First International Symposium on Visualization in Software Engineering, SEVIZ, (London).

2008, Program Committee: Third International Workshop on Requirements Engineering Visualization (REV'08), (Barcelona).

2007, Program Committee: Information Visualization (IV'07) Conference (Zurich).

2007, Program Committee: Second International Workshop on Requirements Engineering Visualization (REV'07), (New Delhi).

2006 Program Committee; Information Visualization 2006 (IV'06) Conferences (London).

2005 Program Committee; Information Visualization 2005 (IV'05) Conferences (London).

2004 Program Committee; Information Visualization 2004 (IV'04) Conferences (London).

2003 Program Committee; Information Visualization 2003 (IV'03) Conferences (London).

1993, Organizer and Chair: Conference on Understanding Images.
The purpose of this conference was to bring together a breadth of disciplines, including physical, biological, computational sciences, technology, art, psychology, philosophy, and education, to define and discuss the issues essential to image understanding within the computer graphics context.

University Service

Pace University

Co-founding faculty member of the Pace University Computer Science Department at Pace's downtown Manhattan campus (1983). Helped guide the growth of the department, including the mentoring of new faculty. Helped

orchestrate the ACM/CSAB (now ABET) accreditation of Pace University's BS in Computer Science degree. This degree was one of the first 19 degrees accredited in the United States.

Member (Chair, 2014 – 2015), Seidenberg School Faculty Affairs and Scholarly Release Time Review Committee

Member (Chair: 2006 – 2010, 2012), 2013, 2014), Computer Science Department Tenure and Promotion Committee

Member (1983 – 2010), Computer Science Curriculum Committee

Member (2004 - Present), Software Engineering Curriculum Committee

Member (2008 - 2009), Board of Trustees Committee on Information Technology

Member, (2009 - Present), Board of Trustees Administrative Affairs Committee

Member, (2011 - Present), Pace University High Performance Computing Committee.

Member (Spring, 2009), Seidenberg School Reorganization Committee

Member, (Summer, Fall, 2009), Associate Provost for Academic Affairs Search Committee

Member, (Spring 2010), Provost Review Committee

Member, (Fall 2012 – Present), Steering Committee, Helene & Grant Wilson Center for Social Entrepreneurship

Niagara University (Undergraduate)

President, Inter-dormitory Council (1970-71). At the request of the University Board-of-Trustees, surveyed the entire student population as to their interest in coed visitation. Mobilized faculty and students to canvas over 92% of the student population to create a statistically meaningful survey. Three years later Niagara University opened its first coed dormitory.

Chairman, Academic Affairs Committee of Student Government (1970-71). Initiated, organized and executed not only the first systematic, objective faculty evaluation by students at Niagara University, but also was the first to employ computer technology for its analysis.

Editor, Yearbook, 1969-70, 1970-71. Delivered two complete yearbooks on time. Managed all aspects of product (including design, layout, and photography) and process (including scheduling, staff, and budgets).

Additional: Student newspaper (reporter and editorial cartoonist), freshman track team (member), varsity track team (manager), university band (assistant director), cheerleader, radio station (DJ), publications board.

University of Cincinnati (Graduate)

Chair, Communications Board.
Member, Executive Committee, University Senate.
Member, University Research Council.
Member, Executive Committee, Graduate Student Council.
Member, Executive Vice President for Academic Affairs Search Committee.

RESEARCH AND SCHOLARLY INTERESTS

Scientific and information visualization; novel user interfaces for visualization; distributed and collaborative visualization; integration of visualization into lifecycles for scientific research and software engineering; development of visualization systems at the intersection of art, science, and technology; the artistic origins of information visualization; and the long-term conservation of time-based digital art.

RESEARCH SUPPORT

F.T. Marchese, Grant to found Pace Center for Advanced Media, (January 2000 – December 2005), $250,000.

S.M. Merritt, F.T. Marchese, D. Anderson, J. Coppola, High Performance Network Connections for Science and Engineering Research - HPNC: Internet 2 at Pace University, NSF-ANI-0125043, (September 2001 – August 2003), $382,804.

F.T. Marchese, Office of the Future Project, Powerdsine, Inc. Equipment Grant (2005), $2,500.

F.T. Marchese, "A Visualization Supercomputer," Scholarly Research Award (May 2009). $2,140.

F.T. Marchese, "A Course in Informatics and Natural Computation," *Thinkfinity Initiative for Innovative Teaching, Technology and Research Grant (May 2009).* $7,500.

F.T. Marchese, Release time award for fall 2009 semester to write grant proposals for Pace Digital Gallery (Fall 2009), Office of the Associate Provost for Sponsored Research and Economic Development.

F.T. Marchese, NYU *Faculty Resource Network Grant,* Visiting Scholar NYU (Spring 2009). Audited course entitled *Curatorial Studies I* at NYU Institute of Fine Arts and Metropolitan Museum of Art

F.T. Marchese, NYU *Faculty Resource Network Grant,* Visiting Scholar NYU (Fall 2009). Audited course entitled *Text and Image in Medieval Art* at NYU Institute of Fine Arts.

F.T. Marchese, Funding for Pace Digital Gallery, Center for Downtown New York (Fall 2009), $7,500.

F.T. Marchese, NYU *Faculty Resource Network Grant,* Visiting Scholar NYU (Fall 2010). Audited course entitled *Art in Alternative Spaces* at NYU Steinhardt School of Culture, Education, and Human Development.

D. Strahs and F.T. Marchese, "A Three-Dimensional Visualization and Projection Workbench for the Pace HPC Initiative," *Thinkfinity Cornerstone 3 Interdisciplinary Informatics Grant (December 2011)*, $14,449.

ART EXHIBITIONS CURATED

Digital Art and the Urban Environment, October 4 – 25, 2013, group show including Stanza, Annette Weintraub, Lynn Cazabon, Robert Ladislas Derr, and Xavier Leonard, Pace Digital Gallery.

Flow, November 26th – December 20th, 2012, group show including Julie Theriot and Fred Soo; Jeff Clark; Cedric Kiefer and Daniel Franke; Kristian Kloeckl; and the NASA/Goddard Space Flight Center Scientific Visualization Studio, Pace Digital Gallery.

Turbulence @ Pace Digital Gallery 2, April 5 – April 29, 2011, with co-curators Jo-Anne Greene, Helen Thorington, and Jillian McDonald, Pace Digital Gallery.

David Crawford: Retrospective, September 21 – October 22, 2010, with co-curators Jo-Anne Greene, Helen Thorington, and Jillian McDonald, Pace Digital Gallery.

Map Marking, August 6 – May 7, 2010, group show including Robin Hewlett, Ben Kinsley, Christian Nold, Jeremy Wood, Sha Hwang, and Stanza, Pace Digital Gallery.

Inner Lives, November 17 – December 18, 2009, collaborative work by Martin Wattenberg and Fernanda Viégas, Pace Digital Gallery.

Digital Marginalia, October 19 – November 13, 2009, group show including W. Bradford Paley, Michael Takeo Magruder, Daniel C. Howe, Aya Karpinska, Kate Armstrong, Michael Tippett, and Cassidy Curtis.

M.S. THESES DIRECTED

"Vmoox: A Cross-platform Video publishing Solution for Mobile Devices," Lior Shefer, 2009.

"Building an Ad-Hoc Windows Cluster for Scientific Computing," Andreas Zimmer, 2006.

"CommonWall: A Fulltime Video Conferencing System," Sawipa Sakulchareon, 2003.

"A Peer-to-Peer Collaborative 3D Virtual Environment for Visualization," Yi Pan, 2003.

"Crystal Dome: An Omni-directional Display," Jonas Borjessen, 2001.

"Using Authoring Software to Create a Multimedia Application," Bo Wang, 1997

"MoVideo - An Interactive System for Creating Molecular Video Sequences," John Lochney, 1993.

"Distributed Molecular Rendering," Jovan Rokvic, 1993.

"Colorspace for Molecular Visualization," Jennifer Polack, 1993.

"Corporate World: An Artificial Life Modeling Approach for Examining Corporate Behavior in Various Economic Environments Within a Specific Industry," Desmond B. Knower, 1993.

"Cellular Automata Simulations of Animal Coat Patterns," Thorunn Sigfusdottir, 1993.

"Soft Shadowing for Molecular Graphics," Bruce Williams, 1992.

"Use of Fractal Algorithms to Generate Terrain Models," Con Sweeney, 1992.

"Simulation of Erosion Using Cellular Automata," Anoop Kumar, 1991.

"Network Simulation with Cellular Automata," Michael Gora, 1991.

"Graphics Script Interpreter," Lydia Hwang, 1991.

"Hudson River Monitor: A Graphical Hypertext Database Approach," Cem Barut, John Hamilton, 1990.

"A Generic UNIX Workstation in an Education/Research Environment: Analysis, Design and Implementation," Jean F. Coppola, 1990.

PRESENTATIONS and PANELS

Notable

Medieval Visualization and the Art of Memory, Keynote Address, 18th International Conference on Information Visualisation – IV2014, (Paris, 16 - 18 July).

Downright Medieval: Information Visualization in the Middle Ages, Keynote Address, 15th International Conference on Information Visualisation – IV2011, (London, July).

Archives and Cultural Memory, public panel discussion at Media in Transition 7: Unstable Platforms: The Promise and Peril of Transition (MIT, Boston, May 13-15, 2011).

"Reasoning and Representation: the Sketching of Organic Chemical Reaction Mechanisms." Refereed position paper for ACM CHI 2006 Workshop entitled "Sketching" Nurturing Creativity: Commonalities in Art, Design, Engineering, and Research, April 2006 (Montreal, Canada).

"Abstraction, Design and the Synthesis of (Molecular) Objects." Refereed presentation at the Conference on the Philosophy of Models and Simulations, June 2006 (Paris, France).

"Text and (con)Text in Molecular Visualization." Oral presentation, ACS National Meeting, San Diego, CA, April, 2001.

Other

"The Gothic Cathedral: An Immersive Information Visualization Space," Referred presentation at the 18th International Conference on Information Visualisation – IV2014, (Paris, 16 - 18 July).

"Conserving Software-based Artwork through Software Engineering," Referred presentation at Digital Heritage 2013 (Marseille, France, Oct. 28 – Nov. 1).

"Medieval Information Visualization," Referred presentation at IEEE VIS Arts Program (VISAP), Atlanta, Georgia, October 2013.

"Virtues and Vices: Examples of Medieval Knowledge Visualization," Referred presentation at 17th International Conference on Information Visualization: IV'13 (London, UK, July 15–18, 2013).

"Software Archaeology and the Preservation of Code-based Digital Art," Referred presentation at Archiving 2013 (Washington, DC, April 2-5, 2013).

"The Origins and Rise of Medieval Information Visualization." Refereed presentation at the 16th International Conference on Information Visualization: IV'12 (Montpellier, France, July 11-13, 2012)

"Conserving Digital Art for Deep Time." Refereed presentation at SIGGRAPH 2011 (Vancouver, CA, August 7-11, 2011).

"Exploring the Origins of Tables for Information Visualization." Refereed presentation at the 15th International Conference on Information Visualization: IV'11 (London, July 13-15, 2011).

"Conserving Digital Art for the Ages." Refereed presentation at *Media in Transition 7: Unstable Platforms: The Promise and Peril of Transition* (Boston, MIT, May 13-15, 2011).

"Molecular Rendering with Medieval and Renaissance Color Theory.*"* Refereed presentation at the 14th International Conference on Information Visualization: IV'10 (London, July 26-29, 2010).

"A System for Real-Time Transcoding and Delivery of Video to Smartphones." Refereed presentation at the 14th International Conference on Information Visualization: IV'10 (London, July 26-29, 2010).

"Scouting Requirements Quality Using Visual Representations." Refereed presentation at the 13th International Conference on Information Visualization: IV'09 (Barcelona, Spain, July 2009).

"The Chemical Table: An Open Dialog between Visualization and Design." Refereed presentation at the 12th International Conference on Information Visualization: IV'08 (London, July 2008).

"The Potential for Synergy between Information Visualization and Software Engineering Visualization." Refereed presentation at the 12th International Conference on Information Visualization: IV'08 (London, July 2008).

"An Augmented Wiki for Interactive Scientific Visualization and Evolutionary Collaboration." Refereed presentation at XTech 2007: "The Ubiquitous Web," May 2007, (Paris, France).

"CrystalDome: A Projected Hemispherical Display with a Gestural Interface Refereed presentation at The 11th International Conference information Visualization IV'07 (July 04 - 06, 2007).

"Fostering Asynchronous Collaborative Visualization." Refereed presentation at The 11th International Conference information Visualization IV'07 (Zurich, July 04 - 06, 2007).

"The Making of *Trigger* and the Agile Engineering of Artist-Scientist Collaboration." Refereed presentation at The Tenth International Conference on Information Visualization: IV'06 (London, July 2006).

"Plato's Cave: an Image Stream Installation within an Office Setting." Refereed presentation at The Eighth International Conference on Information Visualization: IV'04 (London, July 2004).

"Dynamically Binding Image to Text for Information Communication." Refereed presentation at The Eighth International Conference on Information Visualization: IV'04 (London, July 2004).

"Adapting Single-User Visualization Software for Collaborative Use." Refereed presentation at The Seventh International Conference on Information Visualization: IV'03 (London, July 2003).

"A Stereographic Table for Biomolecular Visualization." Refereed presentation at The Sixth International Conference on Information Visualization: IV'02 (London, July 2002).

"OpGlyph: A Tool for Exploring Op Art Representation of Height Field and Vector Field Data." Refereed presentation at The Working Conference on Advanced Visual Interfaces: AVI 2002 (Trento, Italy, May 2002).

"Teaching Computer Graphics with Spreadsheets." Refereed presentation at the ACM SIGGRAPH 98 Conference.

ACADEMIC DEVELOPMENT

Degrees Developed

MS in Software Design and Engineering**,** instituted 2004 (co-developed with Sotiris Skevoulis)

BA in Digital Science and Art (co-developed with members of the Department of Fine Arts)

BS in Software Engineering, 2012, (co-developed with Software Engineering Curriculum Committee), pending with NY State Regents.

Courses Initiated and Developed

Graduate
Software Engineering I & II
Computer Graphics
Computer Simulation
Human-Computer Interaction
Artificial Life
Distributed Software Development
Introduction to Parallel and Distributed Computing
Data and Document Representation & Processing
The User Interface from Front to Back
Visual Computing
Requirements Engineering
Contemporary Software Engineering Theory and Practice

Undergraduate
Introduction to Software Engineering
Introduction to Computer Graphics
Advanced Computer Graphics
Computer Vision
Scientific Visualization
Artificial Life
Recent Developments in Internet Technology
Advances in Computing
Visual Thinking – Visual Computing
Visual Computing
Natural Computation

Additional Courses Taught

Undergraduate
Introduction to Computer Science I & II
Data Structures
Systems Analysis and Design
Introduction to Computing

Corporate Training
Introduction to the PC
Introduction to Microsoft Excel
Introduction to WordPerfect
Introduction to Microsoft Word
PC Upgrade and Maintenance
Introduction to Harvard Graphics
Introduction to PowerPoint
Introduction to Programming with Basic
Introduction to C/C++
Advanced C/C++

SOCIETY MEMBERSHIPS
AAAS (American Association for the Advancement of Science)
ACS (American Chemical Society)
IEEE (Institute of Electrical and Electronics Engineers)
IEEE Computer Society
ACM (Association for Computing Machinery)
ACM Special Interest Group for Graphics (SIGGRAPH), Pioneer Member.
ACM Special Interest Group on Hypertext and the Web (SIGWEB)
Information Visualization Society
Sigma Xi (The Scientific Research Society)
Upsilon Pi Epsilon (International Computer Science Honor Society)

INTERESTS and HOBBIES
Now: Art and architecture, travel, digital photography, food and wine

Then: Listening to (particularly jazz) and playing music (clarinet and saxophone ensembles, flute), photography (formats: 35 mm, 2 ¼ x 2 ¼, view camera), (genre: scientific photography, photojournalism)).

PUBLICATIONS

Research and Scholarly

1. F.T. Marchese (ed.). *Media Art and the Urban Environment - Engendering Public Engagement with Urban Ecology*. Springer-Verlag. In press.

2. E. Banissi, F.T. Marchese, J. Johansson, and C. Forsell (eds.). 2014. *Information Visualisation - Techniques, Usability & Evaluation*. Newcastle upon Tyne: Cambridge Scholars Publishing.

3. F.T. Marchese. "The Beginnings of Medieval Information Visualization," in E. Banissi, F.T. Marchese, J. Johansson, and C. Forsell (eds.), *Information Visualisation - Techniques, Usability & Evaluation*. Newcastle upon Tyne: Cambridge Scholars Publishing, 2014.

4. E. Banissi, M.W. McK. Bannatyne, F. T. Marchese, M. Sarfraz, A. Ursyn, G. Venturini, T. G. Wyeld, U. Cvek, M. Trutschl, G. Grinstein, V. Geroimenko, S. Kenderdine, and F. Bouali (editors). 2014. *Proceedings of the 18th International Conference on Information Visualization: IV'14* (Paris, July 15–18, 2014), IEEE Computer Society, Washington, DC.

5. F.T. Marchese. 2014."The Gothic Cathedral: An Immersive Information Visualization Space." In *Proceedings of the 18th International Conference on Information Visualization: IV'14* (Paris, France, July 15–18, 2014), IEEE Computer Society, Washington, DC, pp. 220 – 224.

6. F.T. Marchese. 2013. "Conserving Software-based Artwork through Software Engineering," In *Proceedings of Digital Heritage 2013* (Marseille, France, Oct. 28 – Nov. 1), vol 2, pp. 181 - 184.

7. F.T. Marchese. 2013. "Medieval Information Visualization," In *Proceedings of the IEEE VIS Arts Program (VISAP)*, Atlanta, Georgia, October 2013.

8. E. Banissi, H. Azzag, M.W. Bannatyne, S. Bertschi, F. Bouali, R. Burkhard, J. Counsell, A. Cuzzocrea, M. J. Eppler, B. Hammer, M. Lebbah, F.T. Marchese, M. Sarfraz, A. Ursyn, G. Venturini and T.G. Wyeld (editors). 2013. *Proceedings of the 17th International Conference on Information Visualization: IV'13* (London, UK, July 15–18, 2013), IEEE Computer Society, Washington, DC.

9. F.T. Marchese. 2013. "Virtues and Vices: Examples of Medieval Knowledge Visualization," In *Proceedings of the 17th International Conference on Information Visualization: IV'13* (London, UK, July 15–18, 2013), IEEE Computer Society, Washington, DC, pp. 359 - 365.

10. F.T. Marchese. 2013. "Superfund 365: Merging Art and Visualization with the Environment," *EarthDesk, Pace Academy for Applied Environmental Studies Blog*, Peer reviewed and edited blog posting, June 16, 2013. http://earthdesk.blogs.pace.edu/2013 /06/16/ superfund-365-merging-art-and-visualization-with-the-environment/.

11. F.T. Marchese. 2013. "Software Archaeology and the Preservation of Code-based Digital Art," in *Proceedings of Archiving 2013* (Washington, DC, April 2-5, 2013). Springfield, VA: Society for Imaging Science and Technology, pp. 25 -30.

12. F.T. Marchese. 2013. "Periodicity, Visualization, and Design," *Foundations of Chemistry*, Volume 15, Issue 1 (April), pp. 31-55.

13. F.T. Marchese and E. Banissi (eds.). 2013. *Knowledge Visualization Currents: From Text to Art to Culture,* London: Springer-Verlag.

14. F.T. Marchese. 2013. "Tables and Early Information Visualization," in F.T. Marchese and E. Banissi (eds.), *Knowledge Visualization Currents: From Text to Art to Culture,* London: Springer-Verlag, pp. 35 -61.

15. F.T. Marchese. 2012. *Flow*, Catalog, Pace Digital Gallery (November). Pace University, NY.

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