

DAVID MILAMdma35@sfu.cawww.sfu.ca/~dma35/dmilam@post.harvard.eduwww.3dmilam.com**EDUCATION:**2007-May 2011
(expected)**PhD Student at the School of Interactive Arts and Technology (SIAT):** Simon Fraser University, Surrey BC Canada

- Coursework: Qualitative & Quantitative Research Methods, New Media, Advanced Game Design, Directed Readings in Interactive Narrative, Computational Art and Design, Computational Poetics, and Theory and Design of Games
- Research interest in 3D virtual environments and interactive storytelling in video games

2003-2004

Master in Design Studies: Digital Media and Production Environments, Harvard University Graduate School of Design (GSD). Cambridge, MA

- Academic investigation in digital culture, [advanced computer modeling](#), [product fabrication](#), [real-time simulation](#), and [interactive interfaces](#) to enhance our relationship with the physical environment.

1997-2002

Bachelors of Architecture: University of Southern California (USC) School of Architecture, Los Angeles

- [Study abroad Studio in Italy](#). Classical and contemporary Architecture studied.
- Notable projects investigated [virtual reality in architecture](#), [civic spaces](#) (including [thesis](#)), [inhabiting infrastructure](#), and [urban renovation](#)

TEACHING & RESEARCH ASSISTANTSHIPS:

2010

SIAT Teaching Assistant for Interaction Design (Undergraduate)

2008-2010

SIAT Teaching Assistant for Interactive Video Course (Undergraduate)

2009-summer

Adventures Lead Instructor in Movie Making & Special Effects and Adventures 2D and 3D Game Creation, Digital Media Academy, University of British Columbia, Vancouver

2009-spring

Research Assistant, Cooperative Game Design and Play testing administrator, Bardel Entertainment, Vancouver

2007-2008

Graduate Research Assistant at Simon Frasier University SIAT

- SIAT Engage Me in Interactive Experience (EMIE) Lab: Developing project repository for 3D content & animation for virtual environments & characters.

2004

Graduate Teaching Fellow at Harvard University GSD

- Course in CAD/CAM and 3D Applications

PROFESSIONAL EXPERIENCE:

2009-2010

Program Coordinator, SIAT [TechBytes](#) (Technical Peer Educators) and Graduate Facilitator in Writing and Learning Strategies: [SFU Student Learning Commons](#) Program

2005-2007

Lead Production and Accounts Manager at [Supertour](#) / [Everyscape](#), Boston, MA

- Lead 3D modeler and [projects](#) manager for [Royal Caribbean International/American Express](#), [The Breakers](#), Pebble Beach, [CBS News](#), [Pulte Homes](#), and [vacation/resort hoteliers](#).
- Delivered personalized “experiential virtual walkthroughs” of client property using applications for authoring and building photorealistic 3D content.
- Worked with marketing/engineering teams to implement database-driven design for an information rich online travel booking experience
- Pipeline Developer: created mock-ups, visualization demos, communicated internal/external quality standards for approval, met production schedule, identified workflow and tool improvements, screened and trained production staff.
- Managerial: hiring qualified applicants and mentoring, setting weekly schedules and performance optimizations, quality control/setting standards for approval of media content,

quality assurance testing of deliverables, external liaison for international vendors

- 2004 Contract at [Oosterhuis Lenard](#) “a multidisciplinary design studio”, Netherlands
- Team member for [international competitions & publications](#) included 2D and 3D visualization prototypes
 - Game-engines, parametric modeling aids, scripting, and rapid prototyping studies employed for an acclaimed digital architect.

2004 [Renderer](#) and Computer Modeler, GSD Center for Design Informatics, Cambridge MA

- 2002-2003 Computer Modeler (Programmer Analyst), [USC Institute for Creative Technologies](#) (ICT) Los Angeles, CA
- Developed computer models for real-time virtual reality applications. Project research investigated [Augmented Reality learning](#), [Emotionally Evocative Virtual Environments](#), and [neurosurgical simulation](#).
 - Authored a [Training Environment Navigation Document](#) to foster engagement & learning within the ICT audio and visual theater featuring dynamic 3D sound and stereographic panorama projection
 - Participated in the [Sensory Environments Evaluation \(SEE\) team](#), collaboration between digital artists, computer scientists, and audio programmers in a production environment
 - Co-authored a SEE publication: [Emotionally Evocative Environments for Training](#), Army Science Conference 2002.
 - Mentor for 3D modeling assistants

Related Internships:

- 2001 [Integrated Media Systems Center](#), USC School of Engineering, Student assistant
- 2001 Undergraduate Research Award, [USC Sustainable Cities Program](#)
- 2000 Design Office: USC School of Architecture, Graphic design apprentice
- 2000 Ryan McGuinness, New York City, Graphic design apprentice
- 1999 Grant Kirkpatrick Architects, Los Angeles, Architectural apprentice

BIBLIOGRAPHY:

Written

- Milam, D. and Seif El-Nasr, M. 2010. Analysis of Level Design 'Push & Pull' within 21 games. *Foundations of Digital Games* (Monterey, CA, 2010). [\[PDF\]](#)
- Milam, D. and Seif El-Nasr, M. 2010. Design Patterns to Guide Player Movement in 3D Games. *SIGGRAPH*. (2010). [\[PDF\]](#)
- Magy Seif El-Nasr, Bardia Aghabeigi, David Milam, Mona Erfani, Beth Lameman, Hamid Maygoli, Sang Mah, “Cooperative Game Design Patterns and their Effect on Players’ Behaviours,” in CHI 2010
- D. Milam, M. Seif El-Nasr, and R. Wakkary, "A Study of Interactive Narrative from User’s perspective," in *Handbook of Digital Media in Entertainment and Arts*, D. B. Furht, Ed.: Springer, 2009 [\[LINK\]](#)
- abstract presented, Assassin’s Creed: A Multicultural Read, Magy Seif El-Nasr, Maha Al-Saati, Simon Niedenthal, & David Milam, 2nd Annual Canadian Game Studies Association Conference, Vancouver, Canada, May 2008
- abstract presented, A Phenomenological Study on User Affect for Façade, David Milam, Ron Wakary, Magy Seif El Nasr, 2nd Annual Canadian Game Studies Association Conference, Vancouver, Canada, May 2008
- Boidz: An ALife Augmented Reality Ambient Visualization, David Milam, Philippe Pasquier, Young Investigator’s Forum on Culture Technology (YCT), KAIST University, Daejeon, Korea, August 2008
- Looking at the Interactive Narrative Experience through the Eyes of the Participants, David Milam, Magy Seif El Nasr, Ron Wakkay, 1st Joint International Conference on Interactive Digital Storytelling, Erfurt, Germany, November 2008
- Morie J. F. Iyer K., Valanejad K., Sadek R., Miraglia D., and Milam, D.C. (2002) [Emotionally Evocative Environments for Training](#). Presented at Army Science Conference.
- Williams J, Morie JF, Valanejad K, Sadek R, Miraglia D, Milam D., Williams J, Luigi DP, Leshin J. (2003) Sensory Design for Virtual Environments. Presented at Siggraph, Section on Interaction; Skeches and Applications

Visual

- Publication Cover Design (2005), George P. Sutton, [History of Liquid Propellant Rocket Engines](#). American Institute of Aeronautics and Astronautics, Reston, VA
- ONL [Oosterhuis_Lenard]. (2004) Acoustic Barrier Renderings [SPACE Magazine](#) 445, Korea. Pgs. 52-105
- Milam, David. (2002) Section in "Liberation of Form and Space" chapter in [Developing Digital Architecture](#). Birkhauser, Boston. Pgs. 87-89
- Publication Cover Design (2004), Andrew Gordon, [Strategy Representation, An Analysis of Planning Knowledge](#). Lawrence Erlbaum Associates, London

AWARDS & HONORS:

- ["Best Completion"](#) Award: 2007 Participant in the International Digital Context Innovation Design Workshop, Conference & Joint Exhibition (Taiwan)
- Recipient of the Harvard GSD 2004 [Digital Design Prize](#) for [interactive Carpenter Center for the Visual Arts](#)
- Semifinalist for the 2002 FEIDAD (Far Eastern International Digital Architectural Design) Award titled [3D Extrusion](#), and published in *Developing Digital Architecture*, an international design competition
- Collaborative work displayed at the Museum of Contemporary Art and the Southern California Institute of Architecture. Selected team member for "Projects and Scenarios for the Los Angeles River". 2002

COMPUTING / RELATED SKILLS:

- Computer Modeling/Visualization: XNA C#, Torque, Viewpoint, Virtools, AutoCAD, MAYA + MEL script, XML editing, Unreal editor, 3DStudio Max, Form Z, Rhino, and Proprietary Mok3 3D tools. Five years experience in 3D model manipulation & creation for rendering, animation, and dynamic effects
- Internet and Animation: Processing, Flash + actionscript, and HTML, Max/MSP/Jitter, Adobe Premiere and Adobe After Effects
- Printing: Expert at Adobe InDesign, Quark XPress, Adobe Illustrator, & Adobe Photoshop, for professional presentations.
- Administrative: Microsoft Office, Excel, Access Database development.

MEMBERSHIPS:

- GUR: Games User Research
- DIGRA: Digital Games Research Association
- IDGA: International Game Developers Association
- ACM Siggraph (conference attendee 01,02,03,06, 07, 10)
- ACADIA: Association for Computer Aided Design in Architecture

VOLUNTEERING:

2009

- Web Developer and Publicity for Vancouver Global Game Jam Event

2009

- 2009 Conference Associate, Game Developers Conference Canada