

Curriculum Vitae: Dr. Rodney M. Hoinkes

85 Moutray St., Toronto, ON, M6K 3G4, Canada
Email. rodney@hoinkes.com

Education

Degrees

- 1996 D.Des., Doctor of Design, Harvard University, Graduate School of Design,
"Visualizing Design Processes for Knowledge Mapping"
1992 B.L.A., Bachelor of Landscape Architecture (Honours), University of Toronto

Awards

- 1992 Apple Computers Inc., "Computers for the rest of us", Interface Design Competition,
Winning Team (role: Team Leader)
1992 CSLA (Canadian Society of Landscape Architects) Award
1992 ASLA (American Society of Landscape Architects) Award of Merit
1991 Moriyama & Teshima Award for Excellence
1990 William Rock Jr. Memorial Scholarship

Creative Professional Practice

Positions

- 1997-06 Chief Technology Officer and Co-founder, Immersion Studios Inc.: Technology and Production
Studio for Group-Interactive Immersive Theater and Online Environments
Responsible for product hardware and software technology, theater installation,
office/admin technology, design and management of corporate IT, product support,
product development. Production technical director and project manager. Administrative
duties including hiring, firing, budgeting, business plan development, R&D tax issues, and
corporate procedures (board of directors, secretary, audit committee). Staff of 50+ with
technology budget of \$.5-5 million/yr.
1989-97 Project Manager and Project Associate, Centre for Landscape Research, University of Toronto
1988-90 President and Owner, Softek Systems: Software Development, Consulting, and Training Firm

Technical Skills

Extensive programming skills in C, C++, OpenGL, OpenPerformer, Windows, Networking, Torque Game Engine

Moderate programming skills in DirectX, PHP, SQL, Unix, OpenSceneGraph, OGRE Game Engine, Director, CGI, COM/ActiveX, Web

Extensive technical production skills in 3D modelling for Cinematics and Real-Time, Digital Video, Compositing, Rendering Farms, and Surround Sound

Extensive technical knowledge of real-time 3d graphics, web technologies (CSS, XML, AJAX, SOAP, REST, VRML, Web3d, Google AdSense, etc.), databases (MySQL, MSSQL), networking (TCP, UDP, RTSP), video conferencing, language translation, UNICODE, language versioning, detailed computer hardware and A/V equipment, and most operating systems (Windows, Mac OS, Mac OS X, Unix [IRIX, Solaris], Linux)

Projects/Productions

- 2006 "GankRep", AddOn Module for World of Warcraft MMO with central DB, dynamic mapping
www.gankrep.net (full programming, front-end, back-end)
2005 "Fit-to-go", Interactive Productions, Technical Director & Installation Manager
2005 "Cliffs of Moher", Immersive Production, Technical Director (in progress)
2005 "Egypt", Immersive Interactive Production (w/ JAMTI), Technical Director
2003-5 "Expo 2005, Canadian Pavilion and Engaging Canadians Interactive Network", Interactive
Technology and Production, Dir. of Innovative Technologies
2004-5 "Snow Birds", Immersive Interactive Production (w/ JAMTI), Technical Director
2003-4 "Park Warden", Immersive Interactive Production (w/ Digital Wizards), Technical Director

- 2003-4 "Canada-France CyberExplorer", Interactive Production, Technical Director
- 2003-4 "Dolphins: Fin City", Immersive Interactive Production, Technical Director
- 2002-3 "Exploration: Sea Lions", Interactive Production, Creative Director and Technical Director
- 2001-2 "Nuclear Power: Virtual Newspaper", Interactive Production, Technical Director
- 2001-2 "Nuclear Power: Website", Interactive Production, Technical Director
- 2001-2 "Nuclear Power: DB Kiosk", Interactive Production, Technical Director
- 2001-2 "Content Management System", Interactive Production Mgmt Tool, Technical Director
- 2001-2 "Nuclear Power: Controversy Zone", Immersive Production, Technical Director & Sr. Programming
- 2001-3 "Dinosaurs: Beyond Extinction", Immersive Group Education Production, Assistant Technical Director
- 2001 "Monterey Sanctuaries", Immersive Interactive Production, Technical Director
- 2001 "Sharks: Predator/Prey", Immersive Group Entertainment Production, Technical Director
- 2001 "Zinc", Immersive Digital Video Production, Technical Director
- 2001 "Diamonds", Interactive Real-Time Production, Technical Design/Director
- 2000 "NOAA Sanctuaries", Immersive Digital Video Production, Technical Director
- 2000 "Rapture", Immersion Interactive Game/Movie
- 2000 "S.O.S. – Storm Over Stellwagen", Immersive Group Ecological Education Production, Revised for High-Definition and greater Interactivity
- 2000 "Here's Boston", Immersive Group Entertainment Production, Technical Director
- 2000 "Leafs/Raptors Interactive", Interactive Team and History Production
- 2000 "Fan Studio", Interactive Digital Video Capture and Editing System
- 1999-0 "Vital Space (fr: Espace Vital)", Immersive Group Entertainment Production, Technical Director
- 1999-0 "Unforgettable Boston", Immersive Group Entertainment Production, Technical Director
- 1999 "Shark Attack", Immersive Group Entertainment Production
- 1999 "S.O.S. – Storm Over Stellwagen", Immersive Group Ecological Education Production
- 1998-9 "Monsters of the Deep", Immersive Group Entertainment Production
- 1998-9 "From Out of the Depths", High-Definition Real-Time Digital Holocaust Memorial
- 1998 Rogers New Media, Shareholders Presentation Video Production
- 1997 Garrison Commons, Design History and Alternatives Visualization and GIS Exploration, City of Toronto, Urban Design Department
- 1997 "My Canada", Immersive Group Edutainment Production
- 1996 "Safe Haven", Immersive Electronic Art and Information Environment
- 1995-96 "Oasis", Collaborative Information Landscape through the Internet
- 1994-96 "Crossings", Immersive Electronic Art and Information Environment
- 1992-93 City of Hull GIS Database Development, National Capital Commission (Ottawa)
- 1992 Sun Easements to Parks, City of Toronto, Urban Design Department
- 1991-92 Bernina Pass Dam Visual Assessment (w/ ETH Zurich ORL Institute)
- 1991 Canlands B Massing Evaluation Studies, National Capital Commission (Ottawa)
- 1991 Sussex/MacKenzie Massing Evaluation Studies, National Capital Commission (Ottawa)
- 1990 Campus Co-op Housing Visualization, University of Toronto

Workshops

- 1999 Israel/Palestine/Jordan Region of Peace Design Studio, Harvard University
- 1997 Upper Galilee Development Planning Studio, Harvard University
- 1993 City of Hull Height Study, National Capital Commission
- 1993 Beech Mountain Transmission Study, Tennessee Valley Authority (w/ Harvard University)
- 1991 EXPO 2000 Site Study, City of Hanover, (w/ University of Hanover and Harvard University)

Software/Product Development Projects

- 2005-6 Mystic Maze – 3d multi-player game (lead technical designer)
- 2004-5 Explorer/Builder – 3d game and rich media world creation tool (build on Torque engine base) (technical designer & implementation team member)
- 2004-5 Service Allocation Manager, IsNodeService, IsRelayService, IsReplicationService, IsServiceAllocationManager, IsDBService, IsSubmitService, IsWeatherService, IsMMSService – distributed and massive multi-user communications and replication tools (technical designer & implementation team member) - > 10,000 user support
- 2003-4 TeamCollaborate (working title) – Internet-based persistent collaboration room software (lead technical designer)
- 2003-4 Distributed Shared Content Management System (lead technical designer)

- 2003-4 Immersive Knowledge Mapper – networked collective rich media data and interaction system
- 2002-3 Immersion Exploration Zone – group interactive ‘cinema’ for low-cost installations. A system design and software solution at a fraction of the cost of the Immersion Interactive Cinema.
- 2002-3 IsMultiSim – multi-site hierarchical network server architecture – links gameplay, interactivity between multiple locations with fallback redundancy to each site, master server failover, etc. (technical design and initial implementation)
- 2002 Dynamic Media Server – multiple media, multi-user controllable playback system supporting Digital Video, Images, Flash, Websites, Powerpoint, etc. (technical design)
- 2001-3 Immersion Learning Lab – group interactive facilitated learning theater with Internet2 remote vehicle control, live video feeds, etc.
- 2001-2 Dynamic Graphic Server – multi-screen synchronized graphic display and production system (technical design & principal programming)
- 2001 GameNet – multi-user networked game server & client plugin software (CTO)
- 2000 Immersion Game Theater – group gaming platform
- 2000 NetStorm – network activity simulation utility for prototyping and debugging
- 1999-04 Immersion Interactive Cinema/HD – High-Definition group interactive digital theater
- 1999-06 Poetic Dimensions/HD Audio-Video Server – seamless multi-screen HD digital video and audio control software
- 1998-06 Poetic Dimensions/Audio Sequencer – seamless 5.1 Dolby™ Digital audio control software
- 1998-06 Poetic Dimensions/Video Sequencer – seamless multi-screen digital video control software
- 1998-99 Poetic Dimensions/HD Video Sequencer – High-Def real-time image presentation software
- 1998-06 SimEngine – group interactivity control and synchronization software
- 1997-06 NetController/NetManager – network control/management/update tool for Windows/Unix
- 1997-06 Poetic Dimensions/Real-Time – real-time visualization and interaction software (SGI/Linux)
- 1997-98 Poetic Dimensions/Audio Servers – real-time ambient and 3d positional sound software
- 1997-01 Personal Media Navigator – group interactivity control software
- 1997-06 Immersion Media Lab – group interactive visualization theater environment
- 1997-98 ISdb – interactive database tool with real-time optimizations and Web-interface
- 1997-06 Immersion Interactive Cinema – group interactive digital theater

Installations

- 2005 Immersion CyberExplorer, Japanese school district
- 2005 Immersion CyberExplorer, Kamloops school district 47, BC
- 2005 Interactive Exhibit, Fit-to-go, W5 Science Centre, Northern Ireland
- 2005 Immersion CyberExplorers, Miami Science Centre, USA
- 2005-6 Immersive Cinema, Cliffs of Moher Visitor Center, Ireland (in progress)
- 2004-5 Immersion CyberExplorer, Ontario Science Centre, Museum of Civilization, Canadian Museum of Science and Technology, Maritime Museum of the Atlantic, Prince of Wales Northern Heritage Centre, Montreal Science Centre, Scienceworld, Vancouver
- 2004-5 Immersion CyberExplorers (4), Canada Pavilion, Expo 2005, Japan
- 2003-4 Immersion Interactive Cinema expansion, Mote Aquarium, Sarasota FL, USA
- 2003-4 Immersion CyberExplorer, la Cité des Science et l’Industrie, Paris, France
- 2003-4 Immersion CyberExplorer, Uni. Of Quebec at Montreal, Canada
- 2003 Immersion Exploration Zone, Pier Wisconsin, USA
- 2003 Immersion Interactive Cinema, Discovery Center, Springfield, Missouri, USA
- 2003 Immersion Exploration Zone, Lamphere School District, Michigan, USA
- 2003 Immersion Interactive Cinema, Atlantic Technology Centre, PEI, Canada
- 1996-02 “Yonge-Sheppard Subway Station: Immersion Land”, Immersive Art Installation, Technical Director
- 2002 Immersion Interactive Cinema, Sellafield Visitor Centre, UK
- 2002 Immersion Room (MoodAV), Sellafield Visitor Centre, UK
- 2002 Interactive Kiosks, Sellafield Visitor Centre, UK
- 2002 Virtual Newspapers, Sellafield Visitor Centre, UK
- 2002 Nuclear Energy Website, for British Nuclear Fuels Ltd., UK
- 2002 Immersion Learning Lab, Mote Aquarium, Sarasota FL, USA
- 2001 Immersion Learning Lab, Mystic Aquarium, Mystic CT, USA
- 2001 Immersion Interactive Cinema, Smithsonian Natural History Museum, Washington D.C., USA
- 2001 Immersion Interactive Experience, Great Canadian Mining Show, Traveling Exhibit, Canada
- 2000 Immersion Interactive Experience - FanCam, Air Canada Centre, Toronto, Canada
- 2000 Immersion Interactive Experience - FanZone, Air Canada Centre, Toronto, Canada
- 2000 Immersion Interactive Cinema, Melbourne Museum, Melbourne, Australia

- 2000 Immersion Interactive Experience, New Bedford Whaling Museum, MA, USA
- 2000 Immersion Interactive Cinema, Interactive Science Centre, Montreal, Canada
- 2000 Immersion Interactive Cinema, City of Boston, USA
- 1999 Immersion Media Lab, University of Melbourne, Australia (design and specification)
- 1999 Portable Immersion Media Lab, Harvard University, Cambridge, USA (design and spec)
- 1999-00 Immersion Media Lab, Sheridan Centre for Animation and Emerging Technologies, Toronto, Canada
- 1999 Immersion Media Lab, University of British Columbia, Canada
- 1999 Immersion Media Lab, University of Toronto, Canada
- 1999 Immersion Reality Theater, New England Aquarium, Boston, USA
- 1999 High-Definition Digital Theater, Holocaust Centre, Toronto, Canada
- 1997 Interactive Immersive Theater, Music Building, Exhibition Place, Toronto, Canada

Exhibitions

- 1998 "Monsters of the Deep", 1998 CNE (Canadian National Exhibition), Toronto, Canada
- 1997 "My Canada", 1997 CNE, Toronto, Canada
- 1996 "Safe Haven", DEAF '96, Rotterdam Festival '96, ISEA '96, Rotterdam, Netherlands
- 1996 "Crossings II", Electra '96, Oslo, Norway
- 1995 "Crossings II", DEAF (Dutch Electronic Arts Festival) '95, Rotterdam, Netherlands
- 1995 "Oasis", ISEA (International Society of Electronic Art) '95, Montreal, Canada
- 1995 "Crossings", Ars Electronica '95, Linz, Austria
- 1995 "Crossings", MultiMediale '95, Karlsruhe, Germany
- 1992-93 "Opening the Gates of Eighteenth-Century Montreal", Canadian Centre for Architecture, Montreal (w/ CCA Montreal Research Group)

Grants and Proposals

- 2003-04 Bell Fund – "Park Wardens" – interactive production (through Digital Wizards)
- 2002-03 CANARIE Advanced Research in Interactive Media (ARIM)
Interactive Content Development Guide
- 1998-00 Advanced Animated Character Development for Interactive Virtual Environments,
with Sheridan College and funded by CITO (Communication Industry Technology Ontario)

Publications

- 2004 Interactive Content Development Guide (280pg book on group interaction and immersion content and technology design and perception)

Awards

- 2004 Nominee, British Academy of Film and Television Arts Interactive Awards, Design (Sparking Reaction)
- 2003 Winner, Canadian New Media Awards, Programmer of the Year
- 2002 Winner, International EMMAs, Technical Innovation category
- 2002 Winner, Innovation Award, Interactive Multimedia Arts & Technologies Association (IMAT)
- 2000 Finalist, Canadian New Media Awards, Company of the Year

University Research

Positions

- 1997- Research Associate, Centre for Landscape Research, University of Toronto
- 1990-97 Head of Design Applications, Centre for Landscape Research, University of Toronto
- 1989-90 Research Associate, Centre for Landscape Research, University of Toronto

Software Development Projects

- 2005-6 NeoPD – Real-time 3d Collaboration Environment
- 1999 Smart Model – software modules to glue GIS and 3d Modeling Environments (MapInfo, 3d Studio MAX)
- 1997 MapFactory - Landscape Typology “3d for free” Export Modules
- 1994-97 KM (Knowledge Mapper), Software Design and Development
- 1995-97 Open HeadSpace Software Design and Development, SGI & Windows95/NT
- 1995-97 CLRdb Software Design and Development Lead
- 1994-96 CLRmosaic Software Design and Development Lead
- 1994 HyperText GROVER Software Design and Development (WWW Plant Selection Database)
- 1991-95 CLRview Software Design and Development Lead
- 1991-97 SAVE (Scientific Analysis and Visualization of the Environment), Silicon Graphics Inc.
- 1991-92 Symbol-based Automation for three-dimensional visualization, ESRI (Environmental Systems Research Institute)
- 1990-97 CLRpaint Software Development Assistance
- 1990-97 PolyTRIM Software Design and Development Lead
- 1989 Polyed and TRIM Software Development
- 1989 TRIMS Software Design and Development

Interactive Design Media Projects

- 1996 King-Spadina Smart Model, City of Toronto Urban Design Group
- 1992-98 Historical Research Environments for Temporal GIS, Canadian Centre for Architecture, Montreal Research Group
- 1993 Eileen Gray: Maison en bord de mer (Interactive Historical Reconstruction), ETH Zurich Architecture and TU Delft Architecture (Technical and Design Development)

World-Wide Web Projects

- 1996-97 CSLA Virtual Congress '97, design and implementation of an internet-hosted annual conference for the Canadian Society of Landscape Architects
- 1996-97 TRAIL (Teaching and Research Atlas for Integrated Learning), initiative through the University of Toronto Courseware Development Fund
- 1996 URBANE (Urban Resource Base for Analysis in Networked Education)
- 1995-97 Internet environments for; Canadian Society of Landscape Architects (CSLA), Ontario Association of Landscape Architects (OALA), Association of Computer-Aided Design in Architecture (ACADIA), Canadian Association of Computing in Design (CACD), and the Association of Collegiate Schools of Architecture (ACSA)
- 1995-97 CLIP (Contemporary Landscape Inquiry Project)
- 1995-96 ALICE (Architecture and Landscape Image Collection Explorer), Slide Library Database Development for Distributed World-Wide Web access.
- 1994-96 Interactive Digital Map Atlas Project, University of Toronto
- 1994-97 Landscape Architectural Theses Archive
- 1994-98 Virtual Libraries of Architecture and Landscape Architecture

Landscape Architectural Case Study Projects

- 1995 Toronto Case Study, UN Habitat II Conference Sub-Group

Collaborations

- 1994-97 Community Development Modeling, University of Virginia (Michael A. Stern)
- 1994-96 Interactive Urban Modeling, Bath University, Centre for Advanced Studies in Architecture (CASA) (Dr. Alan Day)
- 1993-97 Interactive Urban Design Information Systems, Harvard University (Malcolm McCullough)
- 1992-97 Interactive Architectural Information Systems, ETH Zurich, Architecture and CAAD

- (Dr. Gerhard Schmitt)
- 1991-97 Representation of Large Landscape Change, ETH Zurich, ORL Institute (Eckart Lange and Sigrid Hehl-Lange)
- 1991-97 Automated 3/4D GIS Inference, Harvard University (Dr. Stephen Ervin and Dr. Carl Steinitz)
- 1991 CSCW (Computer-Supported Cooperative Work) Internet Extensions to PolyTRIM, Computer Science, University of Toronto (Ronald Baeker)
- 1989-90 Site Engineering and Layout Extensions to Polyed, Landscape Architecture, University of Massachusetts (Mark Lindhult)

Grants and Proposals

- 2003-04 3D Web, Heritage Canada Research Networks
- 2000 University of Waterloo, University of Toronto, Laval University, CFI Grant for Interactive Design Exploration (CLR participation)
- 1999 Sheridan College CFI Grant for Immersive Theater (CLR participation)
- 1999 University of British Columbia CFI Grant for Immersive Theater (CLR participation)
- 1996-97 TRAIL, Training and Research Atlas for Integrated Learning, University of Toronto Courseware Development Fund
- 1996-00 EvNet, "Computational Support Mechanisms for Spatial Literacy in Education: Evaluating Computer-Aided Spatial Literacy Learning Environments", Strategic Research Networks in Education and Training, Social Sciences and Humanities Research Council of Canada.

Community Service

- 1995-97 Development of the CSLA (Canadian Society of Landscape Architects) World-Wide Web Server
- 1994-96 Initial design and implementation of the university-wide Environmental Studies World-Wide Web Server

Workshops

- 1996 GIS and Landscape Visualization in Highway Development, w/ University of Ljubljana, Slovenia
- 1996 Worlitz Garten Reich Region/EXPO 2000, w/ FH Anhalt (Germany) and Harvard University
- 1992 Seaton Newtown, w/ University of Toronto and Harvard University
- 1991 Snyderville Basin, w/ Harvard University and Utah State University

Exhibitions

- 1995 17th-Century Montreal Timeline, 10th Annual Meeting of the Association for History and Computing. (w/ Canadian Centre for Architecture)
- 1995 17th-Century Montreal Timeline, 18th International Congress of Historical Sciences. (w/ Canadian Centre for Architecture)
- 1994 Eileen Gray: Architecture for the Senses, Harvard University GSD (w/ ETH Zurich)
- 1993 Centre Works, Centre for Landscape Research, School of Architecture and Landscape Architecture (w/ John Danahy, Robert Wright)

Awards

- 2000 Art History Web Association: "Web Research Award Winner" (Juried award)
- 1992 GIS World and GIS Europe Magazines: "Best of GIS Images"
2nd Prize, Bernina Pass Dam Visual Assessment Project (w/ Eckart Lange and Sigrid Hehl-Lange)

Publications

- 2002 Electronic Culture: History, Theory and Practice, compiled by Timothy Druckrey, MIT Press. (article on Crossings) (invited)
- 1999 Looking, moving, linking – extending our discipline, Garten + Landschaft, Nov 1999 (Co-author: John Danahy) (invited)
- 1996 Landscape Analysis through Computation: Animating the Mind, Zapscales '96, Netherlands. (invited)
- 1995 Computational Issues in Landscape Planning: Decision-making in Sub-watersheds, Watershed Management Symposium, Environment Canada (co-author: Robert Wright)
- 1995 PolyTRIM: Collaborative Setting for Environmental Design, CAAD Futures '95. (Co-author: John Danahy)
- 1995 Dynamic Data Sets as Collaboration in Urban Design,

- 1995 CAAD Futures '95. (Co-author: Malcolm McCullough)
 3D for Free - Toolkit Expands Visual Dimensions of GIS,
 GIS World Magazine, July 1995. (Co-author: Eckart Lange)
- 1995 The Architecture and Landscape of the Learning Web,
 Computers and the History of Art Journal, Special Issue: Teaching - Images - Internet
- 1994 Playing with Time: Continuous Temporal Mapping Strategies for Interactive
 Environments, 6th Canadian GIS Conference. (co-author: Russ Mitchell)
- 1993 Computational Issues in Urban Design: Developing a Strategy for Solar Impact
 Assessment, CAAD Futures '93. (co-author: Robert Wright)
- 1992 Sun Easements to Parks: Implications for Planning and Zoning, Toronto's Core Area,
 Report to the City of Toronto Planning and Development Department.
 (co-author: Robert Wright)
- 1992 Real-time Utilization of Remote-Sensing in Design Decision-Making,
 Congress of the International Society for Photogrammetry and Remote Sensing
 Conference '92. (co-authors: John Danahy, Robert Wright)

Presentations

- 1999 *Future Directions in Landscape Visualization*, Our Visual Landscape, ETH Zurich (invited)
- 1996 *Zapscales: electronic media in landscape architecture*, International Agricultural College
 Larenstein (NL), European Master of Landscape Architecture program (invited)
- 1996 *A Spatial Literacy Agenda*, Canadian Cartographic Association Annual Conference 1996.
- 1995 *Video Conferencing in Design Education*, CELA (Council of Educators in Landscape
 Architecture) '95
- 1995 *Digital Libraries and Atlases for the World*, Internet Kaleidoscope Panel,
 ARLIS Conference '95. (Invited)
- 1993 *GIS and CAD-based Multimedia in CLRview*,
 Arc/Info Users Conference '93.
- 1993 *GIS and CAD-based Multimedia in CLRview*,
 Silicon Graphics (SGI) Expo '93.
- 1993 *Computational Techniques for the Landscape*,
 National Computer Graphics Association (NCGA) Conference '93.
- 1992 *CLRview: A Toolkit for Three and Four-Dimensional Representation*,
 Urban and Regional Information Systems Association (URISA) Conference '92.

Teaching

Masters Programme in Landscape Architecture, University of Toronto

- 2000 *Adjunct Assistant Professor*
 Design Studio 2 (LAN1012S)
 Visual Communications 2 (ALA1022S)

Department of Geography, University of Toronto

- 1998 *Adjunct Assistant Professor*
 Spatial Information Systems (GGR462/JPG 1914S)

Programme in Landscape Architecture, University of Toronto

- 1997 *Adjunct Assistant Professor*
 Introduction to Computer Modeling: Landscape Architecture (LAN115S)
 Computational Methods (LAN215S)
- 1996 *Adjunct Assistant Professor*
 Computational Workshops in 2nd and 3rd year studios (LAN2/301F)
 Landscape Architectural Computer-Aided Design (LAN211F)
 Computational Application in Social Factors (LAN131F)
 Computational guidance to final projects in 5th year studio (LAN502S and LAN501F)
 Introduction to Computer Modeling: Landscape Architecture (LAN115S)
 Computational Methods (LAN215S)
 Theoretical Foundations of Landscape Architecture (LAN1/2/3/403H,504H)
- 1995 *Adjunct Assistant Professor*
 Computational Workshops in 1st, 2nd, and 3rd year studios (LAN1/2/31F)
 Social Factors, co-instructor (LAN131F)
 Landscape Architectural CAD, co-ordinator (LAN211F)

- Site Engineering, computer-based learning libraries (LAN242F)
- Planting Design, computational workshops (LAN331F)
- 1994 *Studio Instructor*
Regional Planning Studio (LAN3/402S)
- 1992 *Studio Instructor*
Regional Planning Studio (LAN3/402S)
Procedures and Methods Studio (LAN201F)
- 1991-95 *Lecturer*
Introduction to Computer Modeling and Visual Communications (ALA115H)
- 1988-91 *Teaching Assistant*
Computers in Architecture and Landscape Architecture (ALA316H)

Department of Landscape Architecture, Harvard University

- 1997 *Visiting Adjunct Assistant Professor*
MLA Core Studio, Planning and Design of the Landscape
Theories and Methods of Landscape Planning
- 1995 *Teaching Fellow*
MLA Core Studio, Planning and Design of the Landscape
Theories and Methods of Landscape Planning
- 1994 *Teaching Fellow*
Fundamentals of Computer-Aided Design
MLA Option Studio, National Sports Center for the Disabled
- 1993 *Teaching Assistant*
MLA Option Studio, Monroe County Regional Planning

Department of Urban Design and Planning, Harvard University

- 1994 *Teaching Assistant*
Urban Design Studio, Pittsburgh South Side Studio
- 1993 *Teaching Fellow*
Interactive Urban Models

Guest Lecturer

- 2001 University of Toronto, MLA, Praxis Lecture Series, "The More You Move Away, the Closer You Get"
- 2000 University of Toronto, Urban Design, "Interactive Urban Models"
- 1996 Harvard University, Landscape Architecture: Option Studio, "Interactive Landscapes"
- 1996 Harvard University, Landscape Architecture: Visual Landscape: Analysis and Management, Seminar on "Visual Series/Sequence"
- 1996 University of Ljubljana, Landscape Architecture: "3D for Free", "Landscapes of the WWW", and "Visualizing Design Processes"
- 1995 University of Toronto, Architecture: ARC301F Urban Design Studio - "Computational Techniques"
- 1995 V2 Organization, Netherlands, WIRETAP Seminar, "Interactive Art & Design Collaborations"
- 1995 ITR Rapperswil, Zurich (w/ Carl Steinitz and Stephen Ervin), 3-day workshop, "GIS In Landscape Architecture"
- 1994 Harvard University, Architecture: Hypertext Seminar
- 1994 Harvard University, Architecture: Advanced Geometric Modeling
- 1993 Harvard University, Architecture: Advanced Geometric Modeling
- 1993 ETH Zurich, Architecture: Seminar Week in Architecture and CAAD
- 1991 University of Calgary, Computer Science: Guest Lecture Series

Committees

- 1999-00 Technical Advisor, Committee on Computing Operations, Faculty of Architecture, Landscape and Design, University of Toronto