



Prof John W Danahy

landscape architect
knowledge media
researcher
urbanist

A. BIOGRAPHICAL INFORMATION

Personal

Faculty of Architecture, Landscape, and Design
Centre for Landscape Research
230 College Street, Toronto, Ontario, M5T 1R2
(416) 528-9305

Home Address

917 Goodwin Road, Mississauga, Ontario, L5G 4J9
(905) 278-4167

Degrees

1983	M.Sc. Urb. and Reg. Pl.	University of Toronto
1978	Certificate Urban Design	Royal Danish Academy of Art
1977	B.L.A.	University of Toronto

EMPLOYMENT

1990 →	Associate Professor, Tenure	Architecture, Landscape & Design
1992 →	Director	Centre for Landscape Research
2006 →	Coordinator Research	Architecture, Landscape & Design
1998-99	Director, Academic Computing	Architecture, Landscape & Design
1991-92	Chairman, Landscape Arch.	University of Toronto
1989-92	Acting Director	Centre for Landscape Research
1989 →	School of Graduate Studies	University of Toronto
1986 →	DGP – cross app. (1990 →)	Depart. Computer Science/CSRI
1985-90	Assistant Professor, Ten. Str.	University of Toronto
1983-85	Assistant Professor	University of Toronto
1981-83	Lecturer	University of Toronto
1979-81	Teaching Assistant	University of Toronto
1978-84	Associate	Ross Norris Associates
1978-79	Vice-President	Landscape Assoc. Ltd., Toronto

1976	Graphics Consultant	Ecologistics Ltd.
1975	Technician/Planner	C.L.O. Conservation Authority

Professional Affiliations and Activities

1979 →	Ontario Association of Landscape Architects, OALA
1983 →	Canadian Society of Landscape Architects, CSLA
1981 →	Conference of Education in Landscape Architecture, CELA
2005 →	Canadian Design Research Network, CDRN
1986-93	Association for Computer Aided Design In Architecture, ACADIA
1986-01	Canadian Association for Computers in Design Education, CACDE (founding president)
1999 →	Knowledge Media Design Institute (KMDI), University of Toronto
2002 →	Integrated Centre for Visualization, Design and Manufacturing (ICVDM) University of Waterloo
2005 →	Canadian Design Research Network, CDRN

Research and Professional Practice Statement

My primary areas of expertise and research are advanced computing for design, design, urban design, urbanity & social factors in public space design.

My creative practice and research work are predicated on the assumption that better access to information permits a democratic and therefore more equitable approach to the solution of complex value laden environmental problems.

As an educator, I view my mandate as that of improving the overall spatial literacy of society. Better information and better ways of operating on data needed to debate design issues are central products of my research activity.

My computational research and creative practice efforts are focused on the development of information technology as a more powerful medium for intellectual inquiry and creative design of the environment. The projects I undertake seek to improve design thinking through the addition of computational technology to professional design and public decision-making.

The Centre for Landscape Research (CLR) and the Knowledge Media Design Institute (KMDI) and the Integrated Centre for Design Visualization and Manufacturing at the University of Waterloo and Laval (ICVDM) are the primary academic settings for my current work. These units are now contributing to the recently formed Canadian Design Research Network and its National Centre of Excellence. Professional application of my techniques are most often transferred into practice via the National Capital Commission, the City of Toronto and community organizations such as the Friends of Fort York and Citizens for the Old Town.

B. RESEARCH AND PROFESSIONAL PROJECTS

2006-2010	[11]	CDRN National Centre of Excellence – lead by SFU co investigator – project leader of Visualization Theme
2005		Block 32&36 Housing Study Railway Lands for TCHC and DTAH
2005		DuToit Allsopp Hillier – simulation testing of massing for development in the Parliamentary Precinct
2003-04		Heritage Canada – Univ. Calgary, <u>3DWEB</u> – individual; CLR component of \$1.8 mill.grant (10)(1)
2003-2004		Context Development neighbourhood workshop
2002-04	[2]	CANARIE – Immersion Studios Inc, <u>Immersive Content</u>
2000-05	[9]	CFI – Univ. Waterloo, <u>Urban Design Visualization</u> CLR component of \$5.8 mill. grant (9)
2002		National Capital Commission, <u>View Control Documentation</u>
2001-		Friends of Fort York, <u>Fort York OMB Hearing Assistance</u>
2000-02		National Capital Commission, <u>Hull View Control</u>
1998-01	[8]	CFI – UBC Forest Simulation System – CLR partnership

Post Five Year Research and Creative Practice

1999-00		Public Works Canada – <u>Parliamentary Precinct UD Study</u>
1999-00		National Capital Commission, <u>LeBreton Flats Study</u>
1998-99		Univ. of Toronto, <u>Campus VR Model II</u>
1998		National Capital Commission, <u>Metcalfe Blvd. Design Study</u>
1998	[1]	UofT Library, CAAT Lab, <u>Virtual Campus Model I</u>
1997-98	[1]	SSHRC–EVNET Centre of Excellence– <u>Virtual Design Studio</u>
1996-98	[1]	TRAIL – Digital Library Course Devel. Fund – <u>Digital Atlas</u>
1997-98		Provosts Fund - <u>Polytrim Test-bed development</u>
1997		National Capital Commission, <u>Saudi Embassy UD Study</u>
1996	[7]	McLuhan Program / Bell Canada – Onyx VR Computer
1994-96		Provost's Fund – <u>SALA WWW Digital Library</u>
1996		CCA – <u>Frank Lloyd Wright Historical Research Project</u>
1993-96		Silicon Graphics – Equipment Loan – extension
1994		City of Ottawa - <u>Views Analysis Study - Zoning Hts</u>
1994		National Capital Commission - <u>Hull Views Analysis PartII</u>
1993-96	[2]	Canadian Centre for Architecture – <u>Historic Montreal Timeline</u>
1993		National Capital Commission - <u>CanLands A Analysis</u>
1992-93		National Capital Commission - <u>Hull Views Analysis Study</u>
1993		National Capital Commission - <u>Workshop - Hull Views</u>
1993		City of Ottawa - <u>Views Analysis Study - Part II</u>
1992-93	[2]	Canadian Centre for Architecture - <u>Historic Montreal Timeline</u>
1993-94		City of Ottawa - <u>Density Transfer Study - Urban Design</u>
1991-93		National Capital Commission - <u>Views Analysis Study</u>
1991-93	[2]	SGI-SAVE <u>Scientific Vis.&Anal.of Envir.support</u>
1993-94	[1][2]	ESRI - <u>Software Grant</u>

1992	[2]	National Capital Commission - <u>Sussex North Study</u>
1992	[2]	Department of Public Works - <u>Lorne Bldg Workshop</u>
1991-91	[2]	Utah State / Harvard GSD - <u>Snyderville Basin Study</u>
1991-92	[2]	ETH Zurich, ORL - <u>Hydro Dam Visualization in Alps</u>
1991-92	[1]	ESRI - <u>Research Grant</u>
1991-92	[1]	ESRI - <u>Software Grant</u>
1991	[2]	City of Hanover / Harvard / U of Hanover - <u>Expo 2000</u>
1991	[2]	National Capital Commission - <u>CanLands B UD Study</u>
1991	[2]	IBI - <u>Sussex - Market Area Urban Design Study</u>
1991-94	[6]	Silicon Graphics – <u>Equipment</u>
1991		Silicon Graphics - <u>Research Grant- SAVE Project - CLRview</u>
1990		Apple Computer Inc. - <u>External Research Grant</u>
1990-91		National Capital Commission - <u>Core Area Views & Density Study</u>
1989	[3]	Apple Computer Inc.- <u>CSRI Dynamic Graphics Project</u>
1989	[1]	City of Toronto - City Housing Dept.- <u>Bathurst Spadina</u>
1989	[1]	City of Toronto - Urban Design - <u>Data Transfer Analysis</u>
1989	[1]	National Capital Commission - <u>Core Area West Evaluation</u>
1989	[1]	Ont.Ministry of Government Services - <u>Bay Wellesley</u>
1989		Ontario Hydro - <u>Big Chute Generating Station Analysis</u>
1989	[4]	Hough Stansbury Woodland - <u>Gallop+Gallop Sign Study</u>
1989		Silicon Graphics - <u>Equipment Grant</u>
1989		Glendon College - <u>OMB Visual Impact Assessment</u>
1988	[1]	City of Ottawa - <u>City Hall Competition Evaluation</u>
1988		City of Ottawa - <u>King Edward Urban Design Study</u>
1987		Ontario Hydro - <u>Visual Impact Assessment Bridlewood</u>
1987-89	[1]	CN Realty - City Home - <u>Rail Lands Neighbourhood</u>
1988	[3]	Apple Computer Inc.- <u>CSRI Dynamic Graphics Project</u>
1988		City of Ottawa - <u>Can Lands Competition Evaluation</u>
1987-89		Ontario Univ. Research and Incentive Fund - <u>Grant</u>
1987-89		IBM Canada - <u>Equipment Loan</u>
1986-87		Alias Research Inc. - <u>Research Grant</u>
1986-87		Silicon Graphics Computer Systems - <u>Equipment Grant</u>
1986-87	[5]	Ontario Ministry of Housing - <u>Project Management</u>
1986-87	[1]	National Capital Commission (NCC) City of Ottawa
1986-87		National Capital Commission - <u>Parliamentary Precinct</u>
1985		Niagara Escarpment Commission - <u>Bruce to Essa Analysis</u>
1986		National Capital Commission - <u>Ceremonial Routes</u>
1986		Hammerson Canada Inc. - <u>Mississauga Town Centre</u>
1984-85		Connaught Fund, University of Toronto - <u>New Staff Grant</u>

\$3,000,000 Total (approx.) funding to date – Grants, Donations, Practice Contracts as a primary investigator.

* no direct funding to CLR – work off campus

1 Co-investigator - Prof. Robert Wright

2 Co-investigator – Dr. Rodney Hoinkes

- 3 Principal Investigators – Dr.. Ronald Baecker & Prof. William Buxton
- 4 Co-investigator - Prof. Maurice Nelcher, University of Guelph
- 5 Co-investigator - Michael Copas
- 6 Collaborative Environment Assessment project lead by CLR with contributions from MIT, Harvard, Ohio State, U Mass., Montreal, Manitoba, Strathclyde, & ETH Zurich
- 7 with Principle investigator - Dr. Kim Veltman, McLuhan Program, UofT, Phase 2 Rob Harvey and RCAT – Onyx at CLR
- 8 Principal Investigator – Dr. Stephen Sheppard, University of British Columbia
- 9 UofT component of Integrated Centre for Visualization, Design and Manufacturing (ICVDM) Director – T. Seebohm, M. McCool Univ. of Waterloo, P. Cote, Laval Univ.
- 10 Netera, Alberta - D. MacLeod, Univ. Calgary - B. Wyvill, SFU - R. Woodbury, Univ. Alberta - P. Boulanger, Manage Data - W. Suhanic.
- 11 CDRN-NCE – SFU – R.Woodbury - PI

Other Funding:

1997-98	[2]	Plan 2000 – Teaching Laboratory Funding
1993-95		Participant in NSERC Infrastructure Grants for CSRI
1989-93		Participant in NSERC Infrastructure Grants for CSRI
1989-90		Co-ordinated Phase I of the SALA Proposals for Apple Design & Modeling Centre

C. SCHOLARLY WORK

Refereed Articles and Invited Book Sections

2006		<u>SESAME: Towards Better 3D Conceptual Design Systems</u> , Ji-Young Oh, Univ. of Arizona, Wolfgang Stuerzlinger York University, John Danahy, University of Toronto, ACM DIS 2006: The Conference on Designing Interactive Systems
2006		<u>Community Initiated Public Participation: Altering the Urban Design Decision Making Process with Real-Time Immersive Visualization</u> , Mark Lindquist, John Danahy CORP 2006 & Geomultimedia06, Vienna, Feb. 13-16 2006 Proceedings / Tagungsband; Editor / Herausgeber: Manfred SCHRENK ISBN: 3-9502139-0-2 (from 2007: ISBN 978-3-9502139-0-4)
2005		<u>Comparing SESAME and Sketching on Paper for Conceptual 3D Design</u> , Ji-Young Oh, Wolfgang Stuerzlinger, John Danahy, EUROGRAPHICS Workshop on Sketch-Based Interfaces and Modeling (2005) Takeo Igarashi, Joaquim A. Jorge (Editors)

- 2004 Negotiating Public View Protection and High Density in Urban Design in *Visualization in Landscape and Environmental Planning* edited by Eckart Lange and Ian Bishop., Spon Press (in press)
- 2003 Dynamic Immersive Visual Dialogue: in The Real and the Virtual World of Planning, edited by M. Koll-Schretzenmayr, M. Keiner, G. Nussbaumer, Springer-Verlag, (2003)
- 2001 Technology for Dynamic Viewing and Peripheral Vision in Landscape Visualization, in Journal - Landscape and Urban Planning - Elsevier - Special Issue on Landscape Visualization, eds. Lange, Bishop, 2001
- 2000 Opportunities and Constraints in Visualization, Chapter in book - Forests and Landscapes: Linking Sustainability and Aesthetics, International Union of Forestry Research Organizations, eds. Sheppard, Harshaw (2000).
- 2000 Virtual Study Abroad and Exchange Studio, , Dave B., Danahy, J.W, in Special Edition of Ten Best Acadia Papers in Design Automation , Elsevier
- 1999 Visualization Data Needs in Urban Environmental Planning and Design Chapter in Photogrammetric Week 99, ed. Fritsch/Spiller, Wichmann, Stuttgart.
- 1999-00 Looking Around and Moving About: Beyond Still Sampling, Danahy, J.W., Design in Our Visual Landscape: A Conference on Visual Resource Management, Monte Verita Workshop, Lange, E., Bishop, I., Elsevier (in review)
- 1998 Virtual Study Abroad and Exchange Studio, , Dave B., Danahy, J.W, ACADIA Proceedings, Laval.
- 1997 A Set of Visualization Data Needs In Urban Environmental Planning & Design for Photogrammetric Data in Automatic Extraction of Man-Made Objects from Aerial and Space Images (II) Monte Verita Workshop, Gruen, Baltsavias, Henricsson Eds. Birkhauser Verlag Basel
- 1995 Polytrim: Collaborative Setting for Environmental Design, Danahy, J.W., Hoinkes, R., In CAAD Futures '95, The Global Design Studio, Milton Tam and Robert The Eds., Singapore.
- 1992 Multi-School Studio (and Public Service Collaboration - Some Issues, Benefits and Costs Illustrated by a Case Study Steinitz, Timmins, Toth, Danahy - CELA-92, Charlottesville, Virginia, Oct.1992.
- 1992 Real-Time Utilization of Remote Sensing In Design Decision-Making Hoinkes, Wright, Danahy - American Society of Photogrammetry and Remote Sensing, 92 Wash. D.C.
- 1992 The Computer-Aided Studio Critic: Gaining Control of What We Look At - CAAD Futures 91, International Conference for Computer Aided Architectural Design: Education, Research, Application, Zurich, Edited by G. Schmitt, Vieweg, Wiesbaden, Germany, 1992.
- 1992 Ottawa: An Integrated Geographic Information, Height Control and Density Transfer Modeling System, Visualizing Our National

- Capitals: Planning Support Systems for Public Decision-Making Session with MIT, UofT-CLR, NCPC, NCC, URISA 92, Washington DC (Abstract)
- 1991 Predictable Modelling Interaction Using High-Level Constraints: Making Objects Behave As They Would In Our Environment, Papper Danahy, Baecker, in Reality and Virtual Reality, ACADIA 91 edited by Goldman and Zdepski, UCLA, 1991.
- 1991 Real-time 3-Dimensional Decision Support System Software for Urban Design: Height Controls in Canada's Capital - Second International Conference on Computers in Urban Planning and Urban Management, Oxford.(Abstract)
- 1989-90 Irises in a Landscape: An Experiment in Dynamic Interaction & Teaching Design Studio - published in The Electronic Design Studio: Architectural Knowledge and Media in the Computer Era - CAAD Futures 89, edited by McCullough, Mitchell, Purcell, MIT Press, Cambridge Mass.
- 1989 Computing and Design in the Canadian Schools of Architecture and Landscape Architecture: A Proposed Research Agenda for Integrated CAD & GIS in the 90's - published in Proceedings of the Association for Computer Aided Design in Architecture (ACADIA) Workshop 89 Proceedings, University of Florida. (Co-author R.Wright)
- 1989 Intuition & Computer Visualization in an Urban Design Studio - published in ECAADE 1989 Proceedings, Arhus Denmark.
- 1988 Engaging Intuitive Visual Thinking in Urban Design Modelling: A Real-Time Hypothesis - published in Proceedings of the ACADIA Workshop 88, Ann Arbor, Michigan.
- 1987 The Parliamentary Precinct Study: Visual Simulation in Urban Design Decision Making - published in the American Society of Photogrammetry Proceedings of GIS-87, San Francisco.
- 1987 Sophisticated Image Rendering in Design - published in the Association for Computing Machinery Proceedings of SIG CHI+GI '87, Toronto.
- 1985 Participatory Aesthetics and Territorial Control Mechanisms - EDRA '85 Conference (Environmental Design Research Association). (Co-author W. Rock)
- 1984 Adaptive Behaviour in Frontyards of Residential Streetscapes - published in EDRA '84 Conference Proceedings.
- 1984 Computer-Aided-Design Graphics and Design Process - published in the CELA '84 Conference Proceedings (Council of Educators in Landscape Architecture).

Exhibitions, Video & Slide Media

- 1995,96,97 CCA - Canadian Centre for Architecture, Library of Congress & The Frank Lloyd Wright Foundation – Frank Lloyd Wright: Designs for an American Landscape – Toured CCA, Library of Congress, Dallas Museum of Modern Art, curator – David D. DeLong
- 1993 Centre Works : Landscape Dialogue & Electronic Media - Exhibition in School Gallery – exhibition of CLR work.

- 1991-92 CCA - Canadian Centre for Architecture - Opening the Gates Video: A, Evolution of Urban Form & Land Use in Old Montreal Video: B - and Interactive Realtime Knowledge Display Exhibit - Collaborative research project with CCA as part of 350 th anniversary exhibition of founding of Montreal [2]. Curators – Phyllis Lambert & Allan Stewart.
- 1989 CCA - - Canadian Centre for Architecture , Architecture and Its Image - work on inaugural exhibit on computers and architectural representation for exhibition curator. Also published in - Architecture and Its Image by Blau and Kaufman, 1989.
- 1987 The Dynamic Image - A Retrospective of Twenty Years of Computer Graphics at the University of Toronto - one of eight major projects, Koffler Centre, Curator - Prof. R. Baecker, Computer Systems Research Institute Also produced as a Video Tape The Dynamic Image by Prof. R. Baecker, 1989
- 1986 Niagara Escarpment Visual Impact Assessment - Association for Computing Machinery SIGGRAPH Slide Set

Invited Papers

- 1999 Looking, Moving, Linking - Extending Our Discipline, Danahy, J. Hoinkes, R., in Garten + Landschaft, Nov. 99.
- 1998 Structuring Techniques to Make 3D Visualization an Efficient Tool in Planning: Scaling and Focusing the Problem , Danahy, J.W , in GIS `98/RT `98 Conference Proceedings, Toronto.
- 1998 Garrison Creek, City of Toronto: Structuring Municipal GIS for Visualization , Wright, R., Danahy, J.W.,in GIS `98/RT `98 Conference Proceedings, Toronto.
- 1990 Canadian Society of Landscape Architects (C.S.L.A.), Annual Convention, Methods and Procedures for Utilizing Simulation Tools in Landscape Architectural Practice, Calgary
- 1990 LaBash Convention, Mirror Mirror on the Wall: Abstract Reflections & Really Fast Computers, Penn State University
- 1989 Association of Collegiate Schools of Architecture (A.C.S.A.) Convention, ACADIA Research Symposium, Teaching Computer Aided Design at the University of Toronto, Chicago
- 1988 Landscape Architecture Magazine, Exploring Design through 3-Dimensional Simulations, for July/Aug 88. (Co-author R.Wright)
- 1988 Intuition and Computer Visualization in an Urban Design Studio Setting - published in Proceedings of the Fourth International Conference on Systems Research Informatics and Cybernetics, Baden Baden, West Germany.
- 1988 Princeton University, Symposium on Visualization in Scientific Computing, Computer Graphics as a Support to Visual Thinking in Design, for May 88
- 1987 American Society of Landscape Architects Annual Meeting, Experiences in the Use of Sophisticated Computer Graphics in Landscape Architecture.

1987 University of Waterloo, Cooperative on Information Technology,
Computer Displays in Architecture

Papers

- 2005 ASLA Computing 2005 Newsletter Computers in the Design
Process 1987-2005. A Short Historic Perspective. Edward
Flaherty, Mark Lindhult, John Danahy, Kurt Culbertson,
1992 Revolutionizing the Way Cities are Planned - Interview with J.
Danahy by Crispin Littlehales - Iris Universe, Winter 1992, #19,
Mountain View, CA
- 1986 Sophisticated Image Rendering in Urban Design Review - 11th
International Congress on Cybernetics, Belgium.
- 1981 Saving Energy Through Site Design and Community Planning -
published in the Building Toward 2001 Conference Proceedings,
Ministry of Municipal Affairs and Housing, Government of
Ontario.
- 1978 Whitby-Oshawa Lakefront Study, Joint Study for Central Lake
Ontario Conservation Authority; Regional Municipality of
Durham; City of Oshawa; Town of Whitby Planning. Funding by
the above Agencies.

Software Instruments Designed-Supervised

- 2003 -2006 Open Source Polytrim and port to OpenGL and PC systems
- 2003-04 Metatagging for the development of 3D and 4D repository of
Urban Design and Landscape Architecture Precedents
- 1997-00 Further Development of Polytrim testbed software to include
Photogrammetric Image correction interface, terrain modeling,
texture mapping interface and translator for "Poetic Dimensions"
virtual reality system (w/R. Hoinkes) Software Development &
implementation by Stephen Bohus
- 1995-97 Further Development of Polytrim testbed software to include
Radiance rendering interface, GIS thematic visualization tools.
Software Development & implementation by S. McKenzie, R.
Hoinkes,
- 1992-94 CLRview and CLRpaint software packages Version II released
to over 800 different users ranging from NASA to Texaco to
Stanford University (see attached shortlist of users)
Software Development & implementation by
R. Hoinkes, & Stephen Bohus & S. McKenzie,
- 1992-94 Further Development of Polytrim testbed software to include
Hypertext, knowledge mapping and video control functions.
Software Development & implementation by
R. Hoinkes, & Stephen Bohus & S. McKenzie,
- 1990-92 CLRview/Polytrim: Prototype Multi purpose 3D
viewing, modelling, GIS, image
- 1990 Viewshed Analysis and Intervisibility Option to Polytrim

1990	Splash: Paint Programme for Silicon Graphics Systems
1989	Trims: Toolkit for Representation, Interaction Modelling & Simulation (Object Oriented)
1988-89	Trim: Toolkit for Representation, Interaction & Modelling *
1988-89	Polyed: Specialized Polygon Modelling *
1987	TUUMS: Toronto University Urban Modelling System *
1987	Display: Real-time Wireframe Polygon Walk-through Package
1988	ViSiT: Real-time Shaded Surface Rendering Package
1986-89	UNIX Tools: A wide variety of Polygon Modelling and Data Translation Programmes
1986-90	AutoLISP: Customized land. arch. tools for planting design, & terrain functions *
	* software used by other research groups Software Implemented by Staff:
	<i>S. McKenzie, S Ginsberg ,R. Hoinkes, & Stephen Bohus</i>

Research Collaboration

2005 →	CDRN, Canadian Design Research Network
2005 →	History Space Project – Brock University
2003 →	University of Calgary – 3D digital repositories
2003 →	University of Alberta – real-time visualization over networks
2003 →	Simon Fraser University – 3D digital repositories
2000 →	University of Waterloo – software exchange
2000 →	University of British Columbia – software exchange
1997-98	Univ. of Melbourne, Arch. - Virtual Design Studio Exchange
1992 →	ETH Zurich - ORL - GIS Visualization & Polytrim Exchange
1996-98	ETHZurich -Photogrammetry. Image Rectification & Polytrim
1992 →	Univ. of Melbourne.Engineering GIS Visualization & Polytrim
1992-96	ETH Zurich - Chair Arch.Comp. Polytrim Testbed Exchange
1992 →	Harvard GSD, Polytrim Testbed Exchange
1995-97	University of Bath Polytrim Testbed Exchange
1992	Harvard GSD GIS Visualization Workshops Exchange
1991	Univ. Calgary, Comp. Sci."V-lab" Software Integration
1991-92	MIT, Harvard, Ohio State, U Mass., Capital Cities Environmental Assessment Montreal, Manitoba, Strathclyde, Zurich, & UCLA
1989	Univ. of Calgary, Houston Highway Competition Implementation
1989	Univ. of Strathclyde, Software Exchange for Research Prototyping
1989	ETH Zurich Software Exchange for Research Prototyping
1989	Arizona State Univ., Software Exchange for Urban Design
1989	University of Massachusetts Joint Software Development
1989	University of Manitoba Software Exchange for Urban Design

1989	Guelph University	Software Development & Exchange
1988	Princeton University	TUMMS Demonstration Software
1988	Dames & Moore Inc.	GIS Data Transfer Test

Awards and Honours

2006	Block32 Rail Lands housing	Participation team, DTAH
1990	Bathurst Spadina, CIP	Bathurst Spadina Team
1990	Citation Award, A.I.A.	Parliamentary Precinct Team
1988	Citation Award, P.A. Awards	Parliamentary Precinct Team
1988	Canadian Soc. of Land. Arch.	Parliamentary Precinct Team
1986	Citation Award, P.A. Awards	Ceremonial Route Team
1977	CMHC Research Fellowship	Solar Subdivision Design

Lectures, Seminars & Visiting Critic

Nov. 2003	Immersive Visualization and Design in KMD 1001H
Dec. 2003	CANARIE – Advanced Networks Symposium – UofT ORS
Feb 2003	KMDI Collaborative Program, UofT
Feb 2003	University of Oklahoma, Virtual lecture
Oct 2002	KMDI Collaborative Program, UofT
April 2002	Harvard Design School, Advanced Computing Virtual Lecture
July 2000	Landscape Architecture, ETH Zurich.
Feb. 1999	Peter Wall Institute, University of British Columbia.
Aug. 1999	Our Visual Landscape, ETH Monte Verita Workshop
Sept. 1999	Photogrammetric Week 99, Stuttgart
Sept. 1999	Seminar – VISDOME – CAAD Chair ETH
Mar. 1998	Computer Science, User Interface Design – guest lecture
Mar 1998	RTGIS98, Toronto
Oct. 1997	Visualization 97, St. Louis
May 1997	Ascona Workshop, Swiss Federal Insititute of Technology
Oct 1996	Knowledge Media Design Institute, UofT, Lecture Series
June 1996	Rapperswill, CH, Workshop
May 1996	Guest Professor Swiss Federal Institute of Technology
Oct 1995	Guest Professor Swiss Federal Institute of Technology
Sept 1995	Council of Educators in Landscape Arch., Telepresence lecture
May 1995	Swiss Federal Institute of Technology, Architecture Chair, Lecture Series
Oct 1995	MIT Architecture
Jan 1995	Harvard GSD: Landscape Architecture – guest critic
Nov. 1994	Provosts Advisor on Population Health, UofT, Lecture Series
Oct 1994	University of Montreal, Carleton, Laval – digital design review critic
Jan. 1994	Harvard GSD: Landscape Architecture - guest critic

Nov. 1993	Institute for Environmental Studies, UofT, Lecture Series
Oct 1993	MIT, Department of Architecture
May 1993	ERSI Users Conference
May 1993	SGI Expo
Apr. 1993	ETH Zurich: Architecture
Apr. 1993	ETH Zurich: ORL
Apr. 1993	Toronto Siggraph
Nov. 1992	ASLA Convention
Aug. 1992	Simon Fraser Univ. Comp. Sci.
Mar 1992	Canadian Science Writers Association, ROM Planetarium.
Dec 1991	Harvard GSD: Landscape Architecture Graduate Studio Critic
Dec 1990	Governing Council, University of Toronto, Research Update on CLR
Nov 1990	MIT, Department of Planning Graduate Seminar
Nov 1990	Harvard GSD: Landscape Architecture Graduate Seminar
Jan. 1990	Ohio State University, Depart. of Land. Arch., Teaching & Research in CAD.
Dec 1989	U.C.L.A., Department of Architecture, Research Seminar
Dec 1989	University of Toronto, Planning Programme, guest critic
Nov 1989	University of Manitoba, Depart. of Landscape Architecture, Design Simulation
Nov 1989	University of Toronto, Department of Geography, Visual Impact Assessment
Sept 1989	Royal Danish Academy of Art, Architecture School, Representing Socio-Behavioural Information with Computer-Aided Design systems.
Sept 1989	University of Strathclyde, Research Seminar
Jan 1989	University of Guelph, Graduate Seminar
Nov 1988	University of Toronto, Planning Programme, guest critic
Nov 1988	University of Toronto, Senior Alumni Lecture Series, Helping the Layperson See Designs
Mar 1988	U.B.C., Landscape Architecture, Computer Graphics for Visual Impact Assessment
Mar 1988	University of Calgary, Department of Planning, Workshop in Urban Design.
Apr 1987	Harvard University, Graduate School of Design, Advanced Computer Graphics for Urban Design.
Apr 1987	University of Mass., Land. Arch., Advanced Computer Graphics for Urban Design.
Oct 1987	Royal Danish Academy of Art, Architecture School, Lectures on Streetscape Livability and Computers in Design Visualization.
Nov 1987	Silicon Graphics Inc, Mountainview C.A., A Visual Spreadsheet.
Nov 1987	University of Toronto, Department of Geography, Visual Impact Assessment
Nov 1987	ACADIA Conference, University of North Carolina, Raleigh N.C., A Visual Spreadsheet
Oct 1986	University of Toronto, Department of Geography, Visual Impact Assessment

- Nov 1986 Ontario College of Art, Lecture on Advanced Computer Graphics for Urban Design
- Mar 1986 The Electronic Studio Conference, Toronto, Creative Use of Computer Graphics in Design Decision-Making, 1986.
- Feb 1986 University of Calgary, Lecturing in Block-Week course on Computer Aided-Design.
- Feb 1986 UNIX '86 Conference, Toronto, Computer-Generated Imagery for Urban Design and Landscape Planning.
- Nov 1985 University of Toronto, Department of Computer Science, Specifications for Computer-Aided Design Systems.
- Nov 1985 ACADIA Workshop '85, Arizona State University. Image Rendering Tools for the Design Studio.
- Oct 1985 Ontario CAD/CAM Centre, Cambridge, Ont. lecture on Architectural Applications of CAD & University Research.
- Mar 1985 Harvard University, Graduate School of Design, Computer Graphics Lab, lecture on Realistic Image Synthesis for Urban Design Modeling.
- Feb 1985 University of Pennsylvania, Graduate School of Fine Arts, lecture on Realistic Image Synthesis or Urban Design Modeling.
- Feb 1985 Cornell University, Department of Landscape Architecture, lecture on Realistic Image Synthesis for Urban Design Modeling.
- Jan 1985 University of Waterloo, School of Architecture, lecture on Realistic Image Synthesis for Urban Design Modeling.
- Feb 1985 University of Guelph, School of Landscape Architecture, lecture on Realistic Image Synthesis for Landscape Architecture and Land Planning.
- Dec 1984 Université de Montréal, Faculté d'Aménagement, Ecole d'Architecture de Paysage, Visiting Critic.
- Mar 1984 Concordia University, Division of Building Science, Presentation on Computer-Aided Design's Influence on the Design Process.

D. LIST OF COURSES

Undergraduate Courses

1995-00 LAN 501F/502S – Thesis Studio

Graduate Courses

2004-06 LAN 3017: Design Thesis
2004-06 LAN3015: Thesis Preparation
2005-06 LAN3051: Professional Practice
2005 LAN 2037F: Northern Brown Fields Research
2004-06 ARC2034: Advanced Computer Applications
2003 LAN 1011: Studio 1 - Time, Space & Process
2003-04 LAN 2014S Studio 4 - The Social Authority
2003 LAN 2015H Thesis Preparation
2002-04 LAN 3025H Advanced Computing in Landscape Architecture
2002-04 LAN 2034H: Landscape Architecture and Digital Communication

Post Five Year Course History

2000 URB1021: Urban Design Computation
2001 MLA 1012S: Design Studio 2 – Landscape and Culture
1999-00 LAN 402S: Option Studio
1997-00 PLA 1652: Urban Design Practice
1995-99 LAN 311 – Advanced Computer Applications
1995-97 ARC 311 – Advanced Computer Applications
1994 → ARC 302S/402S – Option Studio Digital Design
1993-94 LAN 302S / LAN 402S Collaborative Computing Studio
1989-95 LAN 131F: Social Factors
1992-93 LAN 103 / 203 / 303 / 403 Theory Seminar
1992-93 LAN 402H: Research Seminar
1989-92 LAN 201F: Second Year Design Studio
1987-89 LAN 402S: Fourth Year Computer-Aided Design Studio
1986-94 LAN 352F / ARC 351F: Advanced Computer Applications
1989-90 LAN 390S: Independent Study in Computing
1987-88 ALA 201F: Building and Site Studio
1986-87 ALA 102S: Studio: Introductory Problems I
1985-87 ALA 316S: Computers in Arch. and Landscape Architecture
1985-86 LAN 302S: Site Planning Studio
1985-86 LAN 501F: Community Open Space Design
1985-86 LAN 401F: Joint Studio: Computer Aided Design
1984-85 LAN 401F: Joint Studio: Behaviour Setting Approaches
1984-85 LAN 502S: Senior Design Studio - Thesis

1984-85	LAN 403F: Senior Seminar
1981-85	LAN 272F: Site Planning I
1981-85	LAN 273S: Site Planning II
1981-83	LAN 101Y: Design One
1981-83	LAN 130F: Introduction to Landscape Architecture
1981-83	LAN 160S: Human Factors in Landscape Architecture
1981 →	LAN 390S/F: Independent Studies

Graduate Thesis Supervision

2004	M.L.A. Michael Cullen, University of Toronto.
2002	M.L.A. H. Jouliaie, University of Toronto, ASLA American Society of Landscape Architects Competition – First Place Graduate Design Thesis
1998-00	M.Sc. in Computer Science, University of Toronto
1993-98	M.Sc. in Computer Science, University of Toronto
1994-97	Doctor of Design, GSD, Harvard University.
1986-96	Ph.D. in Computer Science, University of Toronto
1989-90	M.Sc. in Computer Science, University of Toronto
1989-90	M.L.A. at Ohio State University (Advisors Prof. Douglas Way, Prof. Dana Tomlin & Prof. Skip Van Wyk)
1989-90	M.L.A. at University of Massachusetts (Advisor Prof. Mark Lindhult)

E. ADMINISTRATIVE DUTIES

2002-05	OALA Council, Ontario Association of Landscape Architects
2002-05	Canadian Society of Landscape Architects – Educ. Task Force
2003-04	Steering Committee KMDI University of Toronto
2003-04	KMDI Collaborative Programme Steering Committee
2002-03	Management Committee, ICVDM , Integrated Centre for Visualization, Design and Manufacturing, University of Waterloo
2003-04	Executive Committee AL&D, University of Toronto
2003-04	Director CLR, University of Toronto
2002-03	AL&D, Tenure Review Reader
2003-04	AL&D Promotions Committee

F. OTHER RELEVANT INFORMATION

Curriculum & Laboratory Development

- 2003-04 Developed a PC based immersive simulation capability used as a desk critique tool in both Studio 1 and Studio 4.
- 2003-04 Developed a new meta tagging schema and urban design/landscape public spaces repository for the delivery of LAN2034: Landscape Architecture Digital Communication and use in urban design studio teaching.
- 2003-04 Planning and purchase of the first ultra fast gigabit network connection in a Canadian school of architecture and landscape architecture. This facility will make al&d the leading facility for connectivity for applications such a tele-conference and tele-learning distance lecturing.