

FABIO CARRERA

Email: carrera@wpi.edu

URL: <http://www.wpi.edu/~carrera>

BIOGRAPHICAL INFORMATION

Born in Venice, Italy on July 29, 1961. Grew up in Venice until 1978. Moved to the United States in 1979 and remained until 1988. Returned to Italy and lived in Venice from 1988 until 1995. Since 1995, spends 3/4 of the year in the U.S. and the rest in Venice, Italy. Citizen of Italy and Permanent Resident of the US. Married with Jacqueline Marie Beurivage Loughran. Father of Nicolò Zuane, born January 31, 1991.

EDUCATION

DOCTOR OF PHILOSOPHY:
Urban Information Systems and
Planning

Massachusetts Institute of Technology (MIT), Department of Urban Studies and Planning, Cambridge, Massachusetts, USA. Full three-year scholarship and stipend from the department (*Vorbees Fellow*). Recipient of MIT fellowship prize for interdisciplinary scholarship and entrepreneurship (*Hugh Hampton Young Memorial Fellow*). The doctoral dissertation, entitled *City Knowledge: An Emergent Infrastructure for Sustainable Urban Maintenance, Management and Planning*, was a runner-up for the department's best dissertation of the year award.

Harvard University. Graduate courses at the Graduate School of Design on: *Shaping and Preservation of Urban Spaces*, *Historic Preservation*, *Analyzing the Visual Landscape*, *Enforming the Urban* and *The Architecture of the Senses*.

MASTER OF SCIENCE:
Computer Science

Worcester Polytechnic Institute (WPI), Worcester, Massachusetts. Specialized in Artificial Intelligence and Computer Applications in the fields of Conservation of Natural and Cultural Heritage.

BACHELOR OF SCIENCE:
Electrical Engineering

Worcester Polytechnic Institute (WPI), Worcester, Massachusetts. Focus on Computer Engineering and Machine Vision.

ACADEMIC EXPERIENCE

W.P.I.

Adjunct Assistant Professor of *Interdisciplinary and Global Studies*. Full-time faculty position since 1997. **Director** of Venice and Boston Project Centers. **Director** of City Lab. **Adjunct instructor** with the Electrical and Computer Engineering department and with the Computer Science department. **Advisor** of over 150 undergraduate theses on several multidisciplinary topics (1988-present). **Instructor of Computer Science** for courses on "Social Implications of Information Processing" (2000-2003). **Research Assistant** in the *Intelligent Machines Laboratory* (1985-1988).

M.I.T.

Instructor of the *Research Seminar on Urban Information Systems* (Fall 2005), *Spatial Database Management and Advanced Geographic Information* (Spring 2007), as well as for the courses: *Big Plans* (Spring 1998), *Quantitative Reasoning and Statistics* (Spring 1999), *Introduction to Urban Design and Development* (Fall 1999), and *Urban Field Experience* (Fall 2000 – Spring 2001). Short-listed for a **tenure-track position** in Urban Technology and Information Systems (February 2006).

ISTITUTO UNIVERSITARIO DI
ARCHITETTURA DI VENEZIA
(IUAV)

Advisor of theses in the *Sistemi Informativi Territoriali* (SIT) curriculum and in the *Planning* department (2000-present). The SIT degree is equivalent to a degree in *Geographic Information Systems*. **Lecturer** in seminars for the Master course in SIT. Approved as a visiting **assistant professor** in the context on the *Rientro dei Cervelli* ("brain drain") program of the Italian Ministry of Instruction, University and Research (2008-2012).

UNIVERSITY OF VENICE

Advisor of theses in the *Environmental Sciences*, *History and Management* departments (1995-present). **Director** of the *Laboratorio di Informatica Umanistica* at the *Facoltà di Lettere e Filosofia* of the University of Venice (1988-1991). **Instructor** of Computer Applications in the Humanities at various

University of Venice Computer Centers. Development of historical databases to support historical journal articles and books including *Alla Luce della Luna* (author S. Piasentini) and *The Venetian Money Market 1200-1500* (author R.C. Mueller).

RESEARCH EXPERIENCE

- W.P.I**
CITY LAB
Hometown Initiative
E-campus Initiative
Founder and director of a laboratory dedicated to the study of cities and to the development of urban information technologies – both soft and hard – to assist municipalities in their maintenance, management and planning activities. The main areas of research at City Lab are: City Knowledge, Urban Studies, Urban Information Systems, Urban Technologies, and Urban Initiatives (2004-present). As part of the *Hometown Initiative* of City Lab, projects have been completed for the towns of Spencer, Grafton, Shrewsbury, Paxton, West Boylston, Boxborough and Boylston. Moreover, as part of the *E-campus Initiative*, projects have been completed to upgrade the operations of WPI's Plant Services Department, with projects on *e-parking*, *e-buildings* and *e-grounds*.
- EMERGENT SYSTEMS LAB**
Founder and director of a laboratory dedicated to the study, design and development of emergent systems in any area of human endeavor. Initial forays in this realm focused on the emergence of: City Knowledge, of City Sounds, and of *Manuscript Transcriptions* (2004-present).
- VENICE PROJECT CENTER**
Innichen Project Program
Founder and Director of a WPI study-abroad center which, since 1988, has attracted over 450 WPI students from over 30 countries who completed a total of over 130 studies for the city of Venice. (1988-present). Founder and Coordinator of a branch of the WPI *Venice Project Center* located in the Italian Dolomites (Alps), concerned with the study of issues of conservation of mountain heritage (1994-1996).
- BOSTON PROJECT CENTER**
Director of WPI's project program in Boston, Massachusetts (1998- today). Over 100 students and 30 projects for the cities of Boston, Cambridge, Quincy, Brookline and Newton.
- EARTHWATCH**
Watertown, MA
Pincipal Investigator for this non-profit, international research organization in four summer campaigns with the participation of over 200 volunteers. Multimedia catalog of Venetian Public Art. (1994-1997).
- UNESCO**
United Nations Educational,
Scientific and Cultural Organization
Scientific and computer consultant on two, multimillion dollar, international, research projects funded by the Italian Ministry for University and Research in Science and Technology (MURST): *Venice Lagoon Ecosystem* (1991-94) and *Venice Inner Canals* (1992-2002). Consultant on UNESCO-Insula S.p.A. collaboration for the implementation of a *Canal Maintenance Information System* for the day-to-day management of the maintenance of the canals of Venice (1998 - 2002).

PROFESSIONAL EXPERIENCE

- TOWN OF SPENCER**
Massachusetts
Planning Board Member (2004-present). Vice-chair since 2007. Involved in the day-to-day evaluation of planning and development projects. Also member of the *Capital Funding Committee* and the *Zoning By-laws Committee*.
- CENTRAL MASS REGIONAL PLANNING COMMISSION**
Massachusetts
Delegue (2006-present). Involved in regional planning issues in Central Massachusetts. Member of the Physical Development Committee and contributor to the Transportation Committee.
- FORMA URBIS S.A.S.**
Venice, Italy
Pincipal in an engineering, planning and architectural firm, based in Venice, Italy, specialized in information design and knowledge acquisition and in the development of geographical decision-support systems for the management, maintenance and preservation of municipal, cultural and natural resources. (1998-

present). Clients include: the City of Venice, Mount Auburn Cemetery, Insula S.p.A., the Tourist Board (APT) of Venice, COSES, Consorzio Venezia Ricerche and many others.

CITY KNOWLEDGE LLC
Spencer, MA

P **rincipal** in an engineering, planning and architectural firm, based in the U.S. and with the same characteristics of its Italian counterpart *Forma Urbis s.a.s.*, but with a stronger focus on the local application of City Knowledge principles, through innovative Web 2.0 mechanisms (2003-present).

LUMEN S.R.L.
Venice, Italy

F **ounder and partner** of this engineering and design firm specialized in the development of *Energy Conservation* programs for local businesses (1994-1997).

COSES
Venice, Italy

M **ember of the Board** of this scientific institution that monitors socio-economic indicators in Venice and is the preferred source of information for decision makers in the municipal, provincial and regional government. **Consultant** for the development of a traffic plan for the Venetian boat transportation system (1995-1997).

BTU/BRUCE ENGINEERING
Billerica, MA

H **ardware and software engineer** in high-tech, semiconductor furnace control company in Billerica, Massachusetts (1983-1987). Programming in C and Assembly for Motorola 68000 and 6502.

SELECTED CONSULTING EXPERIENCE

CITY OF WORCESTER
Planning Department

P **reparation** of suitability maps and parcel-level buildout analysis in the framework of Executive Order 418 (2003-2004).

CITY OF VENICE
Dept. of Public Services

D **ata collection** in preparation of the Venice Traffic Plan (1997-2004). *Multimedia Catalog of Boat Docks* (1998-2000).

PROVINCE OF VENICE
Transportation Sector

A **nalysis** of Boat Traffic in the Lagoon of Venice (1997-2000).

INSULA S.P.A.
Venice, Italy

D **evelopment** of the *SmartInsula* information system for the management of the maintenance of the inner canals of Venice, *Multimedia Catalog of the Bridges of Venice* (1998), *Multimedia Catalog of Canal Banks* (1999).

VOLUNTEER EXPERIENCE

PRESERVEVENICE
Venice, Italy

F **ounder** (2008-). This is a fledgling non-profit organization being created to actively preserve Venice's cultural heritage and particularly its public art. It is the result of a decade of efforts in cataloguing the over 5,000 objects of art that adorn the streets and canals of Venice.

FORUM FOR THE LAGOON
Venice, Italy

C **o-founder** and former **vice-president** (1994-97). The *Forum* is a non-profit, grass-root institute created to coordinate, inform and educate locally and internationally on issues related to the preservation and sustainable development for the Lagoon of Venice.

UNESCO CLUB
Venice, Italy

C **o-founder** of the Venice branch, coordinator of the "Canals Project" for Venetian school children (1992-1996).

SKILLS AND INTERESTS

LANGUAGES

I **talian** (native), **E** **nglish**, understanding of spoken and written **S** **panish** and **F** **rench**, rudiments of **G** **erman**.

COMPUTER SKILLS

Programming in C, C++, Pascal, Fortran, Basic, Visual Basic, Scheme, Lisp, Prolog, Algol, ADA, Smalltalk, and various assembly languages (Intel and Motorola). Specialized in **Database Design**, and in the design and development of **Spatial Multimedia Information Systems**.

OTHER INTERESTS

Licensed Airplane **Pilot**, Licensed **Scuba Diver**, Licensed **Life Guard**, Shaolin Karate Kempo, Photography, Skiing, Swimming, Running, Biking, Kayaking, Hiking, Snowshoeing, Basketball and Yoga.

HONORS AND AWARDS**M.I.T. AWARDS**

Dissertation of the Year Award. Cash prize as runner-up for the best dissertation of the year award (June 2005).

Hugh Hampton Memorial Fellowship Prize. Winner of the special one-year full scholarship, open to candidates from all MIT departments, for the year 1996-97.

Vorhees Fellowship. Full tuition and stipend for three years by the *Dept. of Urban Studies and Planning* (1996-2000).

Avalon Scholarship. One-semester stipend to support an instructorship with the *Dept. of Urban Studies and Planning* (Fall 1999).

W.P.I. AWARDS

University Ambassador Award for excellence in representing WPI to the outside world (2005).

John Boynton Young Alumni Award for Service to the WPI Community (1999).

President's IQP Award. Advisor of the best undergraduate interdisciplinary projects of the year: *Lagoon Archeology* (1990), *The Museums of Venice* (1991), *A Computerized Catalog of the Outdoor Art in Dorsoduro, Venice* (1995), *A Preliminary Study of the Implementation of a HIFLO™ Vacuum Sewerage System within the City of Venice* (1997), *Re-engineering the Venetian Cargo Transportation System* (2001), and *The Dunes of Venice: A Prototype for the Environmental Atlas of the Lagoon* (2002). Second place with *Mountain Farming in the Italian Alps* (1994) and with *Sedimentation Modeling in the Venetian Canals* (1998). Third place with *Marketing the Boston Museum of Science* (2001), *Optimizing Parking Regulations Enforcement and Revenue Collection in the City of Cambridge* (2003) and *Preserving the Traditional Boats of Venice* (2005).

TAU BETA PI

National Honor Society for Engineering (all disciplines) (1983)

ETA KAPPA NU

National Honor Society for Electrical Engineering. (1983)

SELECTED INVITED CONFERENCES**EU CIVITAS FORUM**
Burgos, Spain

Invited speaker to the **2006 European Sustainable Mobility Forum**, "*Cities in motion: towards a new role for cities in European transport policy*". Presentation on *Demand management and Access Restriction in Venice*. September 27, 2006.

EUROCITIES MOBILITY FORUM
Barbican Center, London, UK

Invited to speak by the *London European Partnership for Transport*. Presentation entitled *Travel Demand Management From Passenger to Freight – the Venice Experience*. November 9, 2006.

BOROUGH OF HILLINGDON
London, UK

Invited speaker at a *Graffiti Conference*. Presentation on "A City Knowledge Approach to Control Graffiti". May 24, 2006.

UNIVERSITY OF CAMBRIDGE
Cambridge, UK

Invitation-only conference on *Venice and its lagoon: State of Knowledge*. Presentation on "Water-related damage to the physical infrastructure of Venice". September 15, 2003.

OXFORD UNIVERSITY
Oxford, UK

Speaker at the European *Earthwatch* conference. Title: *Preserving Venetian Public Art*. April 1996

SMITHSONIAN INSTITUTION
Washington, DC

Plenary speaker at the international conference promoted by the *Museum of American Art*, the *National Institute for the Conservation of Cultural Heritage* and *S.O.S. (Save Outdoor Sculpture)*. Title: *Criteria for the Establishment of Priorities for the Conservation of Public Art*. November 1996.

HARVARD UNIVERSITY
Cambridge, MA

Speaker at the world *Earthwatch* conference. Title: *Field Research for the Conservation of the Public Art of Venice*. October 1996

SELECTED INVITED LECTURES

HARVARD UNIVERSITY
Cambridge, MA

Lecture on *Venice and its environmental challenges*.. Harvard University summer school. June 28, 2006.

Lecture entitled *City Knowledge: an emergent information infrastructure for sustainable urban maintenance, management and planning*.. Harvard University GIS Colloquium Lecture Series. December 3, 2004.

UNIVERSITY OF VIRGINIA
Charlottesville, VA

Lecture entitled *Saving Venice (and the Venetians) with Digital Knowledge*. April 2, 2004.

IUAV
Venice, Italy

Istituto Universitario di Architettura di Venezia. Lecture entitled *City Knowledge: un approccio "middle-out" per la raccolta, l'organizzazione e l'aggiornamento della conoscenza della città*. March 11, 2004.

CITY OF BOSTON
Boston, MA

Presentations about *Boston City Knowledge* to the GIS Roundtable (2003), the Mayor's Neighborhood Council (2004), the MIS department (2004), and the Mayor's advisors on the e-GIS project (2005).

SAVE VENICE, INC.
Boston, MA

Lecture entitled *Saving Venice (and the Venetians) one project at a time*. Annual meeting on October 21, 2003.

PROVIDENCE ATHENEUM
Providence, RI

Presentation of the results of *A Decade of Studies for the Conservation of Venetian Public Art*. April 1998.

BOOKS

VENEZIA LA CITTÀ DEI RII

Co-editor of *Venezia la Città dei Rii*, (Venice the City of Canals), a 471 page, hard-cover, coffee-table book, and **author** of chapters on *Il Traffico Acquatico* (Boat Traffic) , *Il Regime Idrodinamico dei Rii* (The Hydrodynamic Behavior of Canals), and *I Rii Terzi* (The Filled-in Canals), UNESCO-Insula co-production, December 1999.

CITY KNOWLEDGE

Book Prospectus based on Ph.D. dissertation. Expression of interest from *Island Press* (Washington, DC) and preliminary contacts with *MIT Press*.

REFEREED PAPERS

Carrera, Fabio and J. Ferreira. 2007. "The Future of Spatial Data Infrastructures: Capacity-building for the Emergence of Municipal SDIs" *International Journal of Spatial Data Infrastructures Research*.

Carrera, Fabio and L. Hoyt. 2006. "From Plan-demanded Data to Plan-Ready Information: a Rationale for Comprehensive Urban Knowledge Infrastructures" *Journal of Urban Technology*, 13(2), 1-21.

Krueger, Rob, F. Carrera, and J. Farmer. 2006. "Creating Tools for Deliberative Community Planning through Interdisciplinary Research and Community Engagement: The Interactive Visualization Tool (InVsT)" in *Scholarship in Action*,

- Dept. of Housing and Urban Development, Office of University Partnerships, Washington, DC.
- Carrera, Fabio. 2005. "City knowledge as key to understanding the relation between waters and stones in Venice" in Fletcher, C.A., Spencer, T. (eds.) *Flooding and Environmental Challenges for Venice and its Lagoon: State of Knowledge*. Cambridge: Cambridge University Press.
- Canestrelli, Paolo, F. Carrera, M. Cerasuolo, and P. Tomasin. 1995. "La Nebbia a Venezia nel Quarantennio 1951-90", in *Rapporti e Studi*, vol. XII, Venice: Istituto Veneto di Scienze Lettere ed Arti.
- Carrera, Fabio. 1992. "Computerized Catalog of Outdoor Art in Venice with Automatic Estimation of Restoration Costs" in *Conservation of Stone and Other Materials*, UNESCO/RILEM. London : E&FN Spon., p. 831-838.

CONFERENCE PAPERS

- Carrera, Fabio and J. Ferreira Jr.. 2006. "City Knowledge: a middle-out approach for the sustainable emergence of municipal spatial data infrastructures". Workshop entitled *Beyond Spatial Data Infrastructures for the 2006 GIScience Conference*, Muenster, Germany, Sept. 20-23, 2006.
- Carrera, Fabio and B. Glascock. 2006. "City Knowledge: sustainable municipal information infrastructures for London, UK, Boston, Massachusetts and Venice, Italy". *URISA 2006 Annual Conference*, Vancouver, BC, Canada, Sept. 26-29, 2006.
- Carrera, Fabio and A. Hewitt. 2006. "The Premises of City Knowledge: a middle-out approach toward sustainable municipal data management" in proceedings of the *25th Urban Data Management Symposium*, May 15-17 2006, Aalborg, Denmark.
- Carrera, Fabio. 2005. "Making History: an Emergent System for the Systematic Accrual of Transcriptions of Historic Manuscripts," *ICDAR*, pp. 543-449, Eighth International Conference on Document Analysis and Recognition (ICDAR'05), 2005.
- Carrera, Fabio. 2005. "Growing the Tree of Knowledge: extracting informational returns from the maintenance of trees in Cambridge, Massachusetts". Proceedings of the *1st International Conference on Maintenance Management*. Venice, Italy: April 14-15, 2005.
- Krueger, Rob, Farmer, Jay, Carrera, Fabio, Benoit, Daniel. 2004. "Community Participation in Planning: Using GIS and Public Input to Envision Urban Change in 'Real Time'". *NESTVAL conference*. Portland, Me.
- DiBiasio, David , Mello, Natalie A. and Carrera, Fabio. 2004. "A Multilevel Assessment Process for Student/Faculty Team in a Project-Based Learning Environment," *ASEE Meeting*, Salt Lake City, UT, June.
- Carrera, Fabio. 2003. "From 'Plan-Demanded' data to 'Plan-Ready' information to 'Plan-Demanding' knowledge: building an infrastructure for urban maintenance, management and planning". ACSP-AESOP Conference, *The Network Society: the new context for planning*, Leuven, Belgium, July 12, 2003.
- Carrera, Fabio, DiBiasio, David and Mello, Natalie A. 2003. "Undergraduate Engineers Get Credit for Saving Venice", *ASEE Meeting*, Nashville, TN, June.
- Carrera, Fabio, DiBiasio, David and Mello, Natalie. 2003. "Ensuring that Engineers Get Credit for Saving Venice", in proceeding of *Enhancement of the Global Perspective for Engineering Students by Providing an International Experience*, Tomar, Portugal: April.

WORKING PAPERS

- Carrera, F., J. Ferreira, and L. Hoyt. In preparation. "City Knowledge: Transforming Planners from Hunter-gatherers of Urban Data to Farmers of Municipal Information". To be submitted to *Environment and Planning B*.
- Carrera, Fabio. In preparation. "The Premises of City Knowledge and their implications for informed urban planning". To be submitted to *Journal of the American Planning Association*.
- Carrera, F. (and M. Batty?). In preparation. "The Long Tail of Small Cities". To be submitted to *Environment and Planning B*.
- Carrera, Fabio. In preparation. "An analytical data matrix for the sustainable acquisition of City Knowledge". To be submitted to *URISA Journal*.
- Carrera, Fabio. In preparation. "How Privacy and Privatizations are de-priving us of essential urban knowledge". To be submitted to *Environment and Planning A*.
- Carrera, Fabio. In preparation. "Context vs. Content: a Lynchian taxonomy of urban change and its practical implications for sustainable urban information systems". To be submitted to *Computer, Environment and Urban Systems*.
- Carrera, Fabio and J. Ferreira. In preparation. "The Science of Muddling-out: a XXI Century Alternative to the Art of 'Muddling Through'". To be submitted to *Public Administration Review*.
- Carrera, Fabio and D. Pavan. 2006. "A Data-Farming Matrix for the Implementation of Carbon Reduction Plans in London". International Conference *New concepts and approaches for Urban and Regional Policy and Planning?*, Leuven, Belgium, April 2-3, 2007. Abstract accepted.
- Carrera, Fabio and C. Vitone. 2006. "LOUIS: A Scalable System Architecture for the Implementation of the City Knowledge approach in Municipalities", *10th International Conference on Computers in Urban Planning and Urban Management*, Iguassu Falls, Brazil, July 11-13, 2007. Abstract accepted.
- Carrera, Fabio. 2006. "The Fractal Beauty of Cities: evaluating aesthetics in architecture and urban design". *From the 'city beautiful' to the 'beautiful' in the city: a diachronic and interdisciplinary conference*. Tours, France, November 23-24, 2007. Abstract submitted.
- Carrera, Fabio, D. Tagliapietra and S. Guerzoni. 2006. "Place-Knowledge: Institutional Capacity Building for a Distributed Dynamic Atlas of the Venice Lagoon". *URISA 2007*, Washington, DC, August 20-23, 2006. Abstract submitted.

REPORTS

- Il Traffico Acqueo nella Laguna di Venezia*, Report to the Provincial government on the summer weekend traffic campaign of July 12, 1998 in waters outside municipal jurisdiction, Provincia di Venezia, Ufficio Trasporti e Mobilità, August 15, 1999.
- Geographical Information System per la gestione dei Canli Interni di Venezia*, Report on the activities completed in the framework of the UNESCO-Insula agreement, Phase I, UNESCO, August 3, 1999.
- Il Traffico Acqueo nei Principali Rii di Venezia e Canali Laguari*, Report to the Municipal and Provincial governments on the traffic campaign of March 17, 1998 for the counting of boats circulating in waters within municipal and provincial jurisdiction. Venice: COSES. January 31, 1999.
- Il Comportamento Idrodinamico dei Canali Interni di Venezia*, UNESCO report, September 1998.
- Il Traffico Acqueo nella Laguna di Venezia*, Report to the Provincial government on the traffic campaign of July 29, 1997 in waters outside municipal jurisdiction. Venice: Provincia di Venezia, Ufficio Trasporti e Mobilità. December 15, 1997.

Il Traffico Acqueo nei Canali Interni di Venezia, UNESCO report, July 1996.
Le Caratteristiche Fisiche dei Canali Interni di Venezia, UNESCO report, February 1996.

ESSAYS

Carrera, Fabio. 1994. "I Rii e la Qualità della Vita a Venezia", in *COSES Informazioni*, Venice.

Enforming the Sensate. Measuring and Representing the Perception of Change of Place over Time, Harvard University, *Enforming the Urban and The Architecture of the Senses*, May 1999.

The Image of a Good City. Imaging and Good City Form, MIT, advanced seminar on *Imaging the City*, December 1998.

A Carrying Capacity and Attendance Management Strategy for Massachusetts State Parks, Beaches and Reservations, in collaboration with Jeff McGuire and Mark Behn and the Massachusetts Department of Environmental Management, MIT, *Environmental Management*, May 1998.

A Visual Assessment of the Future of East Boston. The Present and Future of View Corridors, View Sheds, Visual Impacts and the Aesthetics of the Streetscapes in East Boston, MIT, *Boston Harbor Design Studio*, May 1998.

Is the Lamp of Memory Still Burning?, MIT, advanced seminar on *Theory of City Form*, May 1998.

Architectural Form and Urban Context. A Visual Preference Study, Harvard University, *Analyzing the Visual Landscape*, December 1997.

Campo Santa Maria Formosa, Venice, Italy: A Case Study of the Application of Visual, Dynamic and Scale-Invariant Analyses for the Description, Interpretation and Evaluation of City Form, Harvard University, *Shaping and Preservation of Urban Spaces*, May 1997.

What cultural heritage do we preserve and why? A preliminary exploration of the rationales, criteria and factors used in deciding which antiquities to preserve and in what order of priority: the case of Venice, Italy, MIT, *Doctoral Research Paper*, May 1997.

The Urban Design Politics of Venice, Italy, MIT, *Urban Design Politics*, December 1996.

PATENTS

Patent for *Pothole Mapper* under consideration.
 Patent for *Autoaccretion* process under consideration.

DOCUMENTARIES

NATIONAL GEOGRAPHIC CHANNEL
 City under Siege

Host and protagonist of the documentary entitled *Venice under Siege* that focuses on Venice seen from the eyes of a Venetian (2000-).

ZDF (GERMAN PUBLIC TELEVISION)
 Acqua Alta

One of the main characters of the documentary nominated for the Ökofilm tour award (2006-). Translated into French and Italian and shown on Sky TV.

TELEVISION SHOWS

TeleMontecarlo. Featured in *Verde Fazzuoli*, a large-audience television show about environmental issues. Included in several shows concerning the Lagoon and the Alps.

RAI (National Italian Broadcasting). Several appearances in television shows.

BBC. Featured in various television shows.

New England Cable News. Interviewed, together with WPI students for the *evening news* (8pm) about the work at the Venice Project Center. Friday, August 15 2003.

Local Networks: *TeleVenezia, ATR Television.*

RADIO PROGRAMS

CBC (Canadian Broadcasting Corporation). Interviewed for a segment entitled “High Tide” as part of a radio series entitled *Gilbert Reid’s Italy*. September 6, 2006. Aired in December 2006.

BBC (British Broadcasting Corporation). Featured in various radio programs (*Rough Guide, BBC in the Morning, Europe Today*). Latest interview on *BBC World Service – Europe Today* on October 2, 2003.

RAI (National Italian Broadcasting). Several appearances in radio programs.

Swedish National Radio. Interview. 1991.

MAGAZINES, JOURNALS AND NEWSPAPERS

Smithsonian Online magazine, Quoted in an article about Venice entitled *Venice’s Uncertainty*. March 2007.

National Geographic magazine, Italian Edition, Quoted in an article about Venice entitled *Mysterious Venice*. February 2007.

Science magazine. Quoted in an article on Venice entitled *A sinking city reveals some secrets*. September 23, 2005.

New Scientist magazine. Article about cargo re-engineering proposal for Venice. September 2003

Wired magazine, Quoted in an article about Venice entitled *The Lost City of Venice*. August 2003.

Smithsonian magazine, Quoted in an article about Venice entitled *Turning the Tide*. September 2002.

National Geographic magazine, photo with WPI student team, working on boat to measure wake damage along canal walls, in article about preservation of Italian heritage. August 1999.

Colors (Benetton Magazine). Mentioned in a special issue about Venice, in relation to the computerized catalog of wellheads. July 1999.

The Chronicle of Higher Education. Articles about the WPI *Venice Project Center*. October 1997.

Massachusetts Institute of Technology: *Technology Review* magazine, October 1995.

Il Gazzettino and **La Nuova Venezia** (Venetian dailies). Numerous newspaper articles, including a full-page spread.

Other press articles on: *Gente Veneta, Boston Globe, Worcester Telegram and Gazette, Earthmatch* magazine, *Earthtreks* magazine, *ASEE Prism, Calliope, The Sunday Telegraph* and others.