

# Curriculum Vitae

## SYMEON CHRISTODOULOU, PhD

### Contact Information

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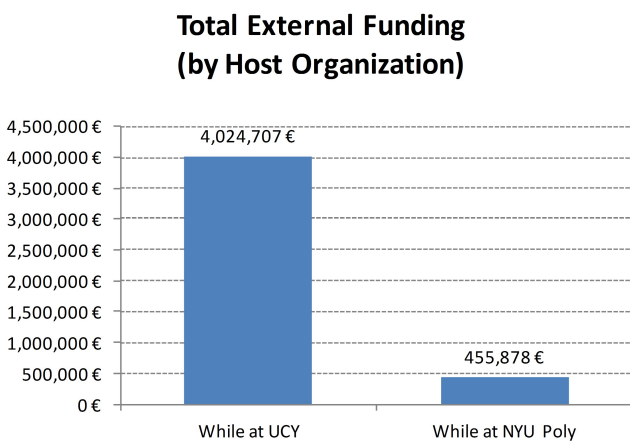
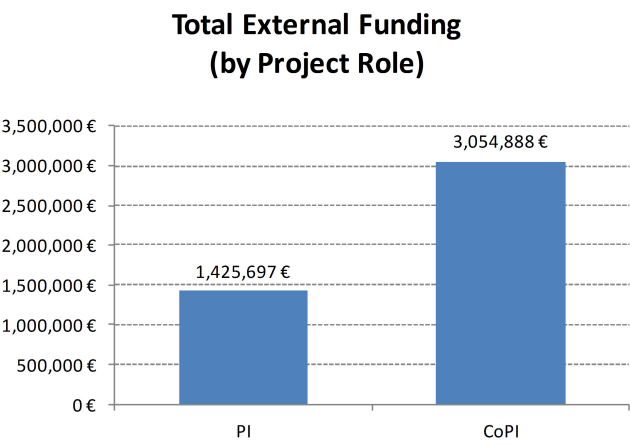
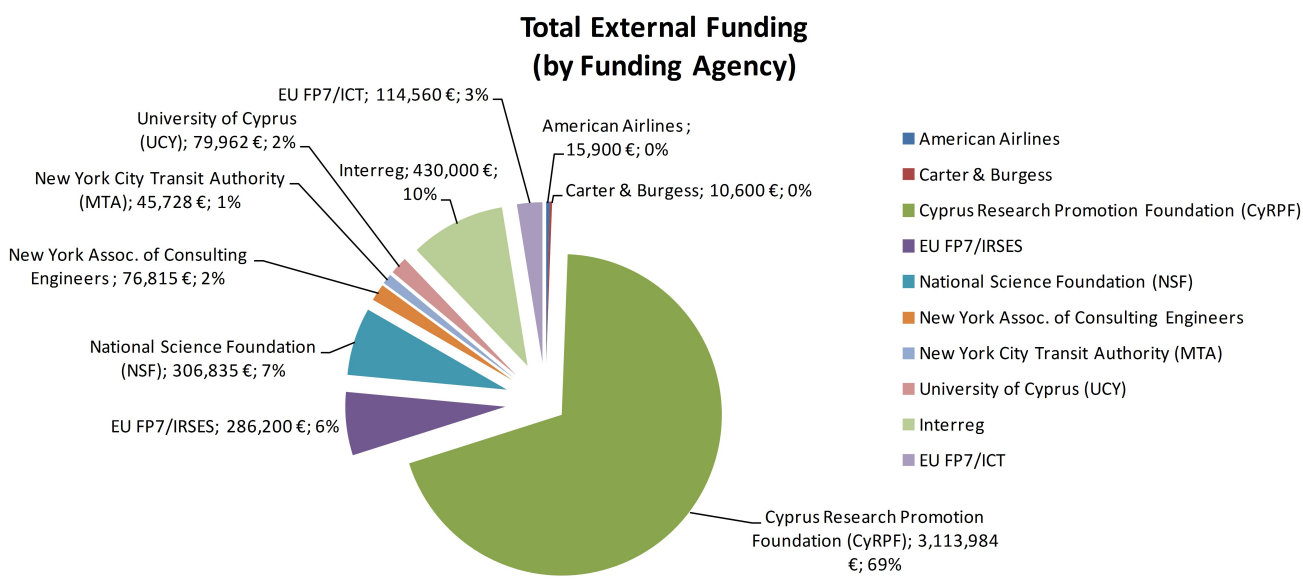
### Research Interests and Summary of Achievements<sup>1</sup>

- Construction engineering and management (primarily topics on resource-constrained scheduling, competitive bidding, building information models, and entropy)
- Computer-aided engineering
  - Fully integrated and automated project processes in the management of construction, with an emphasis on Building Information Models (BIM) and integrated information management systems
  - Information technology, system integration and soft-computing techniques (such as ant colony optimization and artificial neural networks)
- Urban water distribution networks (temporal and spatial vulnerability, and waterloss management)

Summary of Achievements	Accepted or Published/Completed	In Review/ Pending
Papers in peer-reviewed journals	38	4
Papers in peer-reviewed conference proceedings	89	5
Book/book-chapter authoring, or edited proceedings	5	3
Funded research projects as PI (budget/number) <sup>2</sup>	€ 1,552,871 (12)	3,100,000 (2)
Funded research projects as Co-PI (budget/number)	€ 1,943,055 (3)	3,630,000 (3)
Scopus Citations (h-index)	365 (13)	-
Google Scholar Citations (h-index)	735 (17)	-
Scientific and academic awards	4	-
Technical reports	7	-
Member of conference scientific committees	25	-
Supervision of PhD theses (major adviser or co-adviser)	5	2
Supervision of MSc theses (major adviser)	32	2
Supervision of MEng reports (major adviser)	20	0
Funding Agencies involved with, as reviewer	8	-
Journals involved with, as reviewer	44	-
Courses developed and taught (at UCy)	9	-

<sup>1</sup>Last updated : March 19, 2016

<sup>2</sup>The listed amounts are the budgets allocated to UCy and directly managed/co-managed by Dr. Christodoulou



## Education

1992	<b>Ph.D.</b> , <i>Columbia University</i> , New York City, NY, USA .
1998	
1992	<b>M.Phil.</b> , <i>Columbia University</i> , New York City, NY, USA .
1996	
1991	<b>M.Sc.</b> , <i>Columbia University</i> , New York City, NY, USA .
1992	
1987	<b>B.Sc.</b> , <i>Columbia University</i> , New York City, NY, USA .
1991	

## Professional Experience

2004	<b>University of Cyprus</b> , Dept. of Civil & Environmental Engineering (CEE) . Responsible for developing and teaching undergraduate and graduate courses in construction management and for performing scholarly research leading to refereed publications and funded research projects. Author of numerous publications on construction management, artificial agents, information technology and water loss in urban distribution networks.
<p><b>Principal investigator on externally-funded research projects of about € 970,000 in budget as PI and about € 2.5 million as CoPI, and Cyprus's national representative to the ESF/COST Domain Committee on transport and urban development (2006-2013). The research work on water loss in urban distribution networks has been recognized at various national levels, including a presidential praise and a governmental Environmental Award (2007) awarded to one of the public agencies collaborating on a related research project.</b></p>	
2014 2017	<b>Vice Dean</b> , <i>University of Cyprus</i> , School of Engineering . Managing several School of Engineering matters pertaining to academic programs, budgetary and accounting management, research and administration. Representing the School of Engineering in several University committees.
2011 2013	<b>Chairman</b> , <i>University of Cyprus</i> , Dept. of Civil & Environmental Engineering . Managing most departmental matters pertaining to academic programs, budgetary and accounting management, recruitment of faculty and teaching staff, research and administration. Representing the CEE Department in several School of Engineering and University committees.
2011	<b>Board of Directors' Member</b> , <i>University of Cyprus</i> , Nireas International Water Research Center . Founding and Board of Directors' member of the Nireas International Water Research Center (Nireas-IWRC), a research Center co-financed by the European Regional Development Fund and the Republic of Cyprus through the Research Promotion Foundation and the University of Cyprus. Nireas-IWRC aims the development of cutting-edge water technologies, and the dissemination of water-related technologies to the public, accessible to citizens and practitioners alike ( <a href="http://www.nireas-iwrc.org/index.php">http://www.nireas-iwrc.org/index.php</a> ).
2010	<b>Associate Professor</b> , <i>University of Cyprus</i> , Dept. of Civil & Environmental Eng'g .
2004 2010	<b>Assistant Professor</b> , <i>University of Cyprus</i> , Dept. of Civil & Environmental Eng'g .

### Graduate Courses Developed and Taught at UCy:

- CEE 517 Operations Research in Civil and Environmental Engineering
- CEE 515 Advanced Topics in Construction Management: FIAPP/BIM
- CEE 512 Risk Analysis for Civil and Environmental Engineers
- CEE 511 Construction Engineering & Management

Undergraduate Courses Developed and Taught at UCy:

- CEE 491 Capstone Design Project, II (joint teaching with 2 colleagues)
- CEE 490 Capstone Design Project, I (joint teaching with 2 colleagues)
- CEE 411 Construction Management, II
- CEE 310 Construction Management
- CEE 201 Numerical Analysis

University/School of Engineering/Departmental Committees:

- 2015-201x Member, Undergraduate Studies Committee (CEE Department)
- 2014-201x Board of Directors' Member, Center for Entrepreneurship (UCY)
- 2014-201x Coordinator, Erasmus Mobility Program (CEE Department)
- 2014-201x Coordinator, 'Engineer in Society' seminars (CEE Department)
- 2014-201x Member, School of Engineering Council (School of Engineering)
- 2011-2013 Member, School of Engineering Council (School of Engineering)
- 2011-2013 Member, Undergraduate Studies Committee (University)
- 2011-2012 Chair, Undergraduate Studies Committee (CEE Department)
- 2009-2012 Member, Buildings Committee (School of Engineering)
- 2007-2011 Member, Small Construction Projects Committee (University)
- 2005-2010 Member, Information Systems Committee (School of Engineering)
- 2005-2012 Chair, Information Systems Committee (CEE Department)
- 2008-2009 Member, Campus Traffic Management Committee (University)
- 2007-2009 Chair, Graduate Studies Committee (CEE Department)
- 2006-2007 Member, Campus Development Committee (University)
- 2005-2009 Chair, Buildings Committee (School of Engineering)
- 2005-2009 Chair, Buildings Committee (CEE Department)
- 2005-2007 Chair, Undergraduate Studies Committee (CEE Department)
- 2005-2006 Chair, Library Committee (CEE Department)

2003  
2004

**Civil Engineer & Project Controls Specialist, Nemesis Contracting Ltd, Nicosia, Cyprus .**

Civil Engineer and Project Controls Specialist for a contracting firm, specializing in heavy construction projects (highways, water dams, etc.). Duties involved a range of responsibilities, from civil engineering to construction management tasks, project controls (scheduling and cost controls) and reorganization of the firm to attain its new professional and financial goals. Worked on a £4.1 million highway project (Nicosia) as well as developed company-wide system-integration procedures and software for the company.

1998  
2003

**Assistant Professor & Coordinator of the Construction Program, Polytechnic University, New York City, NY, USA .**

Coordinator of the Construction Program and member of the Center for Construction Management Technology. Responsible for developing relevant Construction Engineering and Management courses, interfacing with Adjunct Professors and being the academic adviser for professionals enrolled in Polytechnic University's *Exec21* Program (a leadership program for Construction Professionals, a winner of the Construction Management Association of America Academic Achievement Award). Participated in restructuring the academic programs in construction management and in developing curricula to emphasize information technology and system integration in construction.

**Recipient of a number of research and academic awards, and of \$430,074 in research funding (including a grant from the National Science Foundation, NSF).**

Provided consulting services to a number of private firms and public agencies on construction management, information technology and system automation issues. Clients include New York City's Metropolitan Transit Authority (MTA), the New York City Association of Consulting Engineers (NYACE), O'Brien-Kreitzberg, Carter & Burgess, Bombardier Transportation Group, Columbia University, Excel Group, etc. A sample list of the projects involved with includes: Columbia University's Capital Construction Program (\$600 million), reconstruction of the Myrtle-Wyckoff Subway Station (\$100 million), Newark International Airport's Monorail System (\$200 million), Dallas International Airport's Automated People Mover (\$200 million), New York City's Penn Station (\$15 million), and American Airlines' Terminal at JFK Airport, NY.

1996  
1998

**Project Engineer, O'Brien Kreitzberg, New York City, NY, USA .**

- **Columbia University Capital Improvement Program, New York City.**  
Project Engineer for projects in Columbia University's \$600 million Capital Improvement Program. Involved in the project management of the construction of a state-of-the-art \$41 million classroom building for the Business and Law Schools, and a number of renovations of lecture halls for the Business School. Duties included project oversight and management services, scheduling and cost control. Duties also included the development and maintenance of a computerized Executive Information System for monitoring project costs, schedule and action items, and training of Columbia University's Dept. Of Facilities, Planning and Design personnel.
- **Newark International Airport Automated People Mover System, NJ.**  
Provided construction management and project scheduling services for the Newark International Airport Monorail System. The \$200 million, 2.5-mile dual track, automated people mover transports airport passengers and employees from north and south long-term parking lots to the airport's three terminals. Duties included project oversight services, scheduling, project management and development of management information systems for operation and system analyses, and for avoidance of schedule delays.
- **Adtranz North America, Elmira, NY.**  
Consulting services on strategy, organization and operations for Adtranz, on the Philadelphia SEPTA System rail project. The project was experiencing schedule delays that called for reorganization of the manufacturing processes of train cars, and improvements in operations. Duties included the examination of existing operations, recommendations on improvements in strategy and organization,

development of work schedules and streamlining of manufacturing processes for maximum efficiency.

1994  
1996

**Project Engineer, Robbins, Pope and Griffis, P.C.,** New York City, NY, USA .

- ***Reconstruction of the Gowanus & Prospect Expressways, New York City.***

Provided construction management services for the New York City's Department of Transportation on the \$100 million reconstruction projects of the Gowanus and Prospect Expressways, New York. Performed constructability and biddability reviews for these projects, scheduling and cost estimating, and development of management information systems for monitoring of the projects's progress (construction schedule and cost control).

1991  
1994

**Research Associate, The Center For Infrastructure Studies, Columbia University,** New York City, NY, USA .

- ***Reconstruction of Columbus Avenue, New York City.***

Performed consulting work for the New York City's Department Of Transportation's Bureau of Highways on the reconstruction of Columbus Avenue, New York City. Responsibilities included revision of engineering plans for the reconstruction of Columbus Avenue, New York City, analysis of traditional street reconstruction (Avenue of the Americas), and development and examination of alternative construction procedures.

- ***Economic Development Corporation, New York City.***

Provided consulting services for the New York City's Economic Development Corporation (EDC) for improvements in productivity and quality of work.

# Scientific/Academic honors and awards

- 2015

**Editorial Board Member**, *Journal of Smart Cities*, Whioce Publishing Pte Ltd (Singapore) .
- May 2015

**‘Excellence in Research’ Award**, *Transport and Logistics Awards 2015*, Greece .  
Awarded by the Hellenic Association of Transport Engineers, for the advancement of research in the field of ‘Safety in Transport’ and the contributions made to the field by the *PRODROMOS* research project.
- 2014

**Member, Board of Directors**, *International Society for Computing in Civil and Building Engineering [ISCCBE]* .
- 2012

**Academic Evaluator**, *Hellenic Quality Assurance & Accreditation Agency (HQAA)*, Athens, Greece .  
Evaluator of academic programs at several universities in Greece, under the auspices of HQAA. HQAA is an independent administrative authority, established by law, and its mission is to support Higher Education Institutions in the implementation of procedures aimed to ensure and improve the quality of the supplied their work, guaranteeing transparency of processes, promote research related issues and updating the state and foundations for modern international developments and trends in this field.
- 2013  
2015

**Editorial Board Member**, *The Scientific World Journal*, Hindawi Publishing Corporation .
- 2012

**Cyprus National Representative**, *European Association of Product and Process Modeling [EAPPM]* .
- 2010

**Editorial Board Member**, *Journal of Information Technology in Construction (IT-Con)* .
- 2009

**Assoc. Editor**, *European Water*, European Water Resources Association (EWRA) .
- Jul 2008

**Presidential Praise**, *Republic of Cyprus* .  
Written praise by the President of the Republic of Cyprus for a study on the sustainable management of urban water distribution systems, published by the University of Cyprus under the “*Academia and Society*” initiative.
- 2007  
2013

**Cyprus National Representative**, *COST Domain Committee on Transport and Urban Development* .
- Dec. 2005

**‘Best Instructor’ Award**, *Democritus University of Thrace*, Greece .  
Awarded in recognition of excellence and dedication in teaching, as an instructor of courses in project management in a multi-university and inter-departmental graduate program offered at the Democritus University of Thrace.
- 2002  
2003

**Inducted as Member**, *International “Who is Who” Historical Society* .  
The Society recognizes successful individuals who are an expert in their area of expertise.
- 2002

**Expert Witness Testimony**, *City Hall*, New York City, USA .  
Expert witness testimony at New York City’s City Hall, on the findings of a study by Christodoulou et al. regarding Qualifications-Based Selection (QBS) of professional architectural and engineering services. The study and accompanying expert-witness testimony at New York City’s City Hall (2002) constituted the pillars on which New York City’s legislation on QBS was passed (2007).
- 1992  
1993

**Graduate Research Assistantship**, *Columbia University*, New York City, USA .  
Awarded by Columbia University on academic merit, for graduate studies in Civil Engineering.

1991  
1992

**Graduate Teaching Assistantship**, *Columbia University*, New York City, USA .

Awarded by Columbia University on academic merit, for studies towards a Master's Of Science Degree in Civil Engineering.

1987  
1991

**C. Prescott Davis Scholarship**, *C. P. Davis Scholars Program, Columbia University*, New York City, USA .

Awarded by Columbia University to ten engineering students annually, in recognition of advanced placement, for research in engineering. This prestigious scholarship placed selected students in research and professional environments from the first year of their undergraduate studies. The C.P. Davis Scholars Program was established in recognition of alumnus C. P. Davis, School of Mines Class of 1922, for his many years of loyalty, leadership and active support of The Fu Foundation School of Engineering and Applied Sciences and Columbia Engineering Alumni Association (CEAA).

1987  
1991

**Full Scholarship**, *United States Agency For International Development (USAID)*, USA .

Awarded by the Agency for International Development for studies towards a Bachelor's of Science Degree in Civil Engineering. The scholarship is made on the merits of scholastic performance and in recognition of outstanding promise in the selected area of studies.



### Grants and Contracts <sup>3</sup>

#### Active or Completed Grants/Contracts

2013 – 2015	Integrated System Platform for the Security, Information and Accessibility of Ports for Intelligent and Multimodal Marine Operations ( <i>‘PRODROMOS’</i> ) Interreg Co-PI (5 other Co-PIs); 1.9 million euro	430,000 €
2013 – 2014	Intelligent Services for Energy-Efficient Design and Life Cycle Simulation ( <i>‘ISES’</i> ) European Commission (FP7-ICT) Co-PI (8 other Co-PIs); 4.4 million euro	114,560 €
2009 – 2013	NIREAS International Water Research Center ( <i>‘Nireas-IWRC’</i> ) Cyprus Research Promotion Foundation Co-PI and Founding Member (7 other Co-PIs)	1,931,900 €
2010 – 2014	Automated Generation of Building Information Models ( <i>‘BIMAuto-Gen’</i> ) European Science Foundation (ESF/IRSES) Co-PI (3 other Co-PIs)	286,200 €
2010 – 2012	Ad-Hoc Wireless Sensor Networks for Automatic Meter Reading (AMR) and Vulnerability Assessment of Water Piping Networks ( <i>‘UCyAMR’</i> ) Cyprus Research Promotion Foundation PI	159,924 €
2006 – 2010	Sustainable Building Development and Construction Management through Virtual Reality Workspaces and Simulation ( <i>‘Virtuality’</i> ) Cyprus Research Promotion Foundation PI (1 other Co-PI); 85,000 £	145,231 €
2009 – 2012	Modeling of Urban Water Distribution Networks and Improvements in Leak-Detection by use of Wireless Sensors ( <i>‘MSAD’</i> ) Cyprus Research Promotion Foundation PI	90,000 €
2006 – 2008	Detection and Management of Water Leaks in Urban Environments Using Wireless Sensor Networks ( <i>‘EDRISENSE’</i> ) Cyprus Research Promotion Foundation PI (4 other Co-PIs); 130,830 £	223,536 €
2008	Bus Routing Optimization ( <i>‘BUS’</i> ) University of Cyprus PI (1 other Co-PI); 4,000 £	6,835 €

<sup>3</sup>The listed amounts are the budgets allocated to UCy and directly managed/co-managed by Dr. Christodoulou

2005 – 2007	Integrated System for Risk Assessment and Management of Urban Water Distribution Systems ( <i>‘EDRISYS’</i> )	218,017 €
	Cyprus Research Promotion Foundation PI (2 other Co-PIs); 127,600 £	
2005 – 2007	Archimedes Research Center for Structural and Construction Technology (startup fund) ( <i>‘ARCHIMEDES’</i> )	73,128 €
	University of Cyprus PI (2 other Co-PIs); 42,800 £	
<i>Approximate Total</i>		521,516 €
2002 – 2004	Water distribution infrastructure management system: An analytical decision-making framework for the planning of rehabilitation, integrating statistical failure models	289,467 \$
	US National Science Foundation (NSF)	
2001 – 2003	Fully Integrated and Automated Project Processes	
	New York City Transit Authority (NYCTA) PI	43,140 \$
2001 – 2002	Qualifications-Based Selection of Professional Architectural/Engineering Services	72,467 \$
	New York Assoc. of Consulting Engineers PI (1 other Co-PI)	
2002	Cost Control System for the Management of the Construction of American Airlines Terminal at JFK International Airport	15,000 \$
	American Airlines PI	
2001 – 2002	Project Control System for the Management of the Construction of the Dallas International Airport	10,000 \$
	Carter & Burgess PI	
<i>Approximate Total</i>		3,145,926 €

In Review <sup>4</sup>

2016 – 2018	Reducing the Environmental Footprint of Transport, Through a Holistic Management of Roadway Pavements and Transport Networks [ODOS]	Interreg Greece - Cyprus PI	1,300,000 €
2016 – 2018	Assessing and Enhancing the Resilience of the Urban Fabric in Seismic Disasters [FortifiedCity]	Interreg Greece - Cyprus PI	1,800,000 €
2016 – 2018	Interoperable Platform For Handling Dangerous Goods and Intelligent Port Facilities Systems [IRIS]	Interreg Greece - Cyprus Co-PI	1,300,000 €
2016 – 2018	Freshwater Efficiency, Safety and Security [FRESS]	Interreg Greece - Cyprus Co-PI	1,430,000 €
2016 – 2018	Energy Planning for Smart Cities [ESEP]	Interreg Greece - Cyprus Co-PI	900,000 €
<i>Approximate Total</i>			6,730,000 €

<sup>4</sup>The listed amounts are the proposal budgets

To be Resubmitted <sup>5</sup>, <sup>6</sup>

2015 – 2019	Transport for People [T4P]	Horizon 2020 /Twinning PI	995,500 €
2015 – 2019	Delivering Cleaner Urban Mobility Together [ARCADIA]	Horizon 2020 /Civitas Co-PI	4,000,000 €
2014 – 2018	Development and Evaluation of an Advanced Decision Support System for Road Condition Monitoring and Maintenance Management to Enhance Efficiency and Safety of Road Assets	Horizon 2020 Co-PI	4,200,000 €
2014 – 2018	Mass Asset Recognition and Intelligent Optimization [MARIO]	Horizon 2020 Co-PI	4,760,000 €

<sup>5</sup>Listed proposals are to be resubmitted, following original submittal to the latest *Horizon 2020 Call for Proposals*

<sup>6</sup>The listed amounts are the proposal budgets

**Refereed Journal Papers (Published, Accepted or Conditionally Accepted)**

(Review Criteria include (1) At Least Two Reviewers and (2) the Opportunity to Implement Corrections)

- J38. **Christodoulou, S.** (2016). “An Entropy-Based Heuristic for Resource-Constrained Scheduling”. *Computing in Civil Engineering*, ASCE. (Conditionally Accepted).
- J37. Agathokleous, A. and **Christodoulou, S.** (2016). “Vulnerability of Urban Water Distribution Networks Under Intermittent Water Supply Operations”. *Water Resources Management*, Springer. (Conditionally Accepted).
- J36. Chari, A. and **Christodoulou, S.** (2016). “Building Energy Performance Prediction Using Neural Networks”. *Energy Efficiency*, Springer. (Conditionally Accepted).
- J35. Fragiadakis, M., Xanthos, S., Eliades, D., Gagatsis, A. and **Christodoulou, S.** (2016). “Graph-based hydraulic vulnerability assessment of water distribution networks”. *Lecture Notes in Computer Science*, Springer (in press).
- J34. **Christodoulou, S.** (2015). “Smarting Up Water Distribution Networks With An Entropy-Based Optimal Sensor Placement Strategy”. *Journal of Smart Cities*, Whioce Publishing.
- J33. Xanthos, S., Fragiadakis, M. and **Christodoulou, S.** (2015). “Generating a Seismic Reliability Assessment for an Urban Water Distribution Network”. *Water Asset Management International*, IWA Publishing, 11(2), 17–20.
- J32. Agathokleous, A., Xanthos, S. and **Christodoulou, S.** (2015). “Real-time Monitoring of Water Distribution Networks”, *Water Utility*, EWRA, 10, 15–24.
- J31. **Christodoulou, S.** and Fragiadakis, M. (2014). “Vulnerability Assessment of Water Distribution Networks Considering Performance Data”, *Infrastructure Systems*, ASCE, 10.1061/(ASCE)IS.1943-555X.0000224, 04014040.
- J30. **Christodoulou, S.**, Gagatsis, A., Xanthos, S., Kranioti, S., Agathokleous, A. and Fragiadakis, M. (2013). “Entropy-Based Sensor Placement Optimization for Waterloss Detection in Water Distribution Networks”, *Water Resources Management*, Springer, 27(13), 4443–4468.
- J29. Fragiadakis, M., **Christodoulou, S.** and Vamvatsikos, D. (2013). “Reliability Assessment of Urban Water Distribution Networks Under Seismic Loads”, *Water Resources Management*, Springer, 27(10), 3739–3764.
- J28. Fragiadakis, M. and **Christodoulou, S.** (2013). “Seismic Reliability Assessment of Urban Water Networks”, *Earthquake Engineering and Structural Dynamics*, Elsevier, 43(3), 357–374.
- J27. **Christodoulou, S.** and Agathokleous, A. (2012). “A Study on the Effects of Intermittent Water Supply on the Vulnerability of Urban Water Distribution Networks”, *Water Science and Technology: Water Supply*, IWA, 12(4), 523–530.
- J26. **Christodoulou, S.**, Tezias, E.S. and Galaras, K.A. (2012). “Resource-Constrained Scheduling of Construction Projects and Simulation of the Entropy Impact on a Project’s Duration and Cost”, *International Journal of Project Organization and Management*, Inderscience, 4(4), 322–338.
- J25. **Christodoulou, S.** (2011). “Water Network Assessment and Reliability Improvements by use of Survival Analysis”, *Water Resources Management*, Springer, 25(4), 1229–1238.
- J24. **Christodoulou, S.** and Ellinas, (2011). “Ant Colony Optimization for Level of Service Improvements in Piping Networks”, *European Water*, Springer, 33, 3–10.
- J23. **Christodoulou, S.**, Agathokleous, A., Charalambous, C. and Adamou, A. (2010). “Proactive Risk-Based Integrity Management of Deteriorating Water Distribution Networks”, *Water Resources Management*, Springer, 24(13), 3715–3730.

- J22. **Christodoulou, S.**, Ellinas, G. and Michaelidou-Kamenou, A. (2010). "The Minimum Moment Method for Resource Leveling using Entropy Maximization", *Construction Engineering and Management*, ASCE, 136 (5), 518-527.
- J21. **Christodoulou, S.** (2010). "Traffic Modeling and College-Bus Routing Optimization Using Entropy Maximization", *Transportation Engineering*, ASCE, 136 (2), 102-109.
- J20. Brilakis, I., Lourakis, M., Sacks, R., Savarese, S., **Christodoulou, S.**, Teizer, J., and Makhmalbaf, A. (2010). "Toward Automated Generation of Parametric BIMs based on Hybrid Video and Laser Scanning Data", *Advanced Informatics*, Elsevier, 24(4), 456-465.
- J19. **Christodoulou, S.** (2010). "Bid Mark-up Selection Using Artificial Neural Networks and an Entropy Metric", *Engineering, Construction and Architectural Management*, Emerald, 17 (4), 424-439.
- J18. **Christodoulou, S.** and Ellinas, G. (2010). "Pipe Network Routing Through Ant Colony Optimization", *Infrastructure Systems*, ASCE, 16 (2), 149-159.
- J17. **Christodoulou, S.** (2010). "Scheduling Resource-Constrained Projects with Ant Colony Optimization Artificial Agents", *Computing in Civil Engineering*, ASCE, 24 (1), pp. 45-55.
- J16. **Christodoulou, S.**, Agathokleous, A., Kounoudes, A. and Milis, M. (2010). "Wireless Sensor Networks for Water Loss Detection". *European Water*, Springer, 30, 41-48.
- J15. **Christodoulou, S.**, Ellinas, G. and Aslani, P. (2009). "Entropy-Based Scheduling of Resource-Constrained Construction Projects", *Automation in Construction*, Elsevier, 18 (7), 919-928.
- J14. **Christodoulou, S.** and Deligianni, A. (2009). "A Neurofuzzy Decision Framework for the Sustainable Management of Water Distribution Networks", *Water Resources Management*, Springer, 24 (1), 139-156.
- J13. Aslani, P., **Christodoulou, S.**, Griffis, F.H., Ellinas, G., and Chiarelli, L. (2009). "Activity Prioritization Under Resource Constraints Using a Utility Index Method", *Open Construction and Building Technology Journal*, Bentham, 3, 33-41.
- J12. Manoliades, O., Pantouvakis, P. and **Christodoulou, S.** (2009). "Improving Qualifications-Based Selection by use of the Fuzzy Delphi Method", *Construction Management and Economics*, Taylor and Francis, 27 (4), 373-384.
- J11. **Christodoulou, S.**, Deligianni, A., Aslani, P. and Agathokleous, A. (2009). "Risk-Based Asset Management of Water Piping Networks Using Neurofuzzy Systems", *Computers, Environment and Urban Systems*, Elsevier, 33 (2), 138-149.
- J10. **Christodoulou, S.**, Ellinas, G. and Aslani, P. (2009). "Disorder Considerations in Resource-Constrained Scheduling", *Construction Management and Economics*, Taylor and Francis, 27 (3), 229-240.
- J9. **Christodoulou, S.** (2009). "Construction Imitating Ants: Resource-Unconstrained Scheduling With Artificial Ants", *Automation in Construction*, Elsevier, 18 (3), 285-293.
- J8. **Christodoulou, S.** (2008). "A Bid-Unbalancing Method for Lowering A Contractor's Financial Risk", *Construction Management and Economics*, Taylor and Francis, 26 (12), 1291-1302.
- J7. **Christodoulou, S.**, Charalambous, B., and Adamou, A. (2008). "Rehabilitation and Maintenance of Water Distribution Network Assets", *Water Science and Technology: Water Supply*, IWA, 8 (2), 231-237.
- J6. **Christodoulou, S.** (2004). "Optimum Bid Markup Calculation using Neuro-fuzzy Systems and a Multidimensional Risk Analysis Algorithm", *Computing in Civil Engineering*, ASCE, 18 (4), 322-330.

- J5. **Christodoulou, S.**, Griffis, F.H., Barrett, L. and Okungbowa, M. (2004). “Qualifications-Based Selection (QBS) of Professional A/E Services”, *Management in Engineering*, ASCE, 20 (2), 34-41.
- J4. **Christodoulou, S.** (2004). “Educating the Civil Engineering Professionals of Tomorrow”. *Professional Issues in Engineering Education and Management*, ASCE, 130 (2), 90-94.
- J3. **Christodoulou, S.** (2003). “A Study on the Procurement of Architectural and Engineering Services for Public Works - A Case for Qualifications-Based Selection (QBS)”, *Transportation Research Board*, TRB, 1861, 151-160.
- J2. **Christodoulou, S.** (2002). “Discussion: Feasibility Study of 4D CAD in Commercial Construction”, *Construction Engineering and Management*, ASCE, 128 (3), 274.
- J1. Griffis, F.H. and Christodoulou, S. (2000). “Construction Risk Analysis Tool for Determining Liquidated Damages Insurance Premiums: A Case Study”, *Construction Engineering and Management*, ASCE, 126 (6), 407-413.

#### Books or Book Chapters (in Internationally-Published Books), or Edited Proceedings

- B5. **Christodoulou, S.**, Michaelidou-Kamenou, A. and Ellinas, G. (2014). “Heuristic Methods for Resource Leveling Problems”, *Handbook on Project Management and Scheduling, 1&2*, Springer (editors: C. Schwindt and J. Zimmermann), ISBN 978-3-319-05442-1.
- B4. **Christodoulou, S.** and Ellinas, G. (2011). “Ant Colony Optimization Agents and Path Routing: The Cases for Construction Scheduling and Urban Water Distribution Networks”, *Ant Colonies: Behavior in Insects and Computer Applications*, Nova Science Publishers Ltd, Hauppauge, NY 11788, USA (editor: Richard Schortemeyer III), ISBN 978-1-61122-023-0.  
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- BP1. **Christodoulou, S.**, Fragiadakis, M., Xanthos, S. and Agathokleous, A. (2016). “Vulnerability Analysis of Urban Water Distribution Networks, Under Normal and Abnormal Operating Conditions”, LAP LAMBERT Academic Publishing, Germany. (To be published by December 2016).

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- JR3. Xanthos, S., Agathokleous, A. and **Christodoulou, S.** (2015). “Experimental and Numerical Investigation of Water-Loss in Water Distribution Networks”. *Civil Engineering and Environmental Systems*, Taylor and Francis.
- JR2. Chari, A., Xanthos, S. and **Christodoulou, S.** (2015). “Stochastic Assessment of the Energy Performance of Buildings”. *Energy Efficiency*, Springer.
- JR1. Georgiou, C., Vamvatsikos, D. and **Christodoulou, S.** (2015). “Building Information Models for Damage Assessment, Cost Estimating, and Scheduling of Post-Earthquake Reinforced Concrete Building Rehabilitation”. *Construction Engineering and Management*, ASCE.

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- JP17. Hadjidemetriou, G., Serrano, M.M., Vela, P.A. and **Christodoulou, S.** (2016). “Patch Defects in Images, Using Support Vector Machines”. *Computing in Civil Engineering*, ASCE.
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- of New York City". Proceedings, *2003 ASCE EWRI 2003 World Water & Environmental Resources Congress*. (Pennsylvania, USA, Jun.23-26, 2003).
- C14. Vanrenterghem-Raven, A., Eisenbeis, P., Juran, I., and **Christodoulou, S.**, (2003). "Statistical Modeling of Space-Time Data". Proceedings, *2003 ASCE EWRI 2003 World Water & Environmental Resources Congress*. (Pennsylvania, USA, Jun.23-26, 2003).
- C13. **Christodoulou, S.**, Griffis, F.H., Barrett, L., and Okungbowa, M. (2003). "In Pursuit of Catalysts For New Technology - A Case for Qualifications-Based Selection (QBS) of Professional A/E Services". Proceedings, *2003 ASCE's Architectural Engineering Institute International Conference on Building Integration Solutions* (Texas, USA, Sep.27-20, 2003).
- C12. Barrett, L., and **Christodoulou, S.** (2003). "FIAPP-based System for Architectural Project Planning". Proceedings, *2003 ASCE's Architectural Engineering Institute International Conference on Building Integration Solutions* (Texas, USA, Sep.27-20, 2003).

## 2002

- C11. Subsomboon, K., **Christodoulou, S.**, and Griffis, F.H. (2002). "Procurement of Services and Materials Using a FIAPP-Based System - New York City Case Studies". Proceedings, *2003 ASCE Construction Research Council* (Honolulu, Hawaii, March 18-20, 2002).

## 2001

- C10. **Christodoulou, S.** (2001). "FIAPP in the Building Construction Industry". Proceedings, *2001 ASCE Conference on Computing in Civil Engineering, Specialty Conference on Fully Integrated and Automated Project Processes (FIAPP)* (Virginia, USA, Sep. 26-29, 2001).
- C9. **Christodoulou, S.** (2001). "FIAPP in the Classroom - Educating the A/E/C Professionals of Tomorrow". Proceedings, *2001 ASCE Conference on Computing in Civil Engineering, Specialty Conference on Fully Integrated and Automated Project Processes (FIAPP)* (Virginia, USA, Sep. 26-29, 2001).
- C8. **Christodoulou, S.**, Christodoulou, E. and Demetriades, O. (2001). "Thin-Client Technology for Fully Integrated and Automated Collaborative Multinodal Environments in Construction". Proceedings, *2001 ASCE Conference on Computing in Civil Engineering, Specialty Conference on Fully Integrated and Automated Project Processes (FIAPP)* (Virginia, USA, Sep. 26-29, 2001).
- C7. Subsomboon, K., **Christodoulou, S.** and Griffis, F.H. (2001). "The Fully Integrated and Automated Project Process (FIAPP) in Procurement and Materials Management". Proceedings, *2001 ASCE Conference on Computing in Civil Engineering, Specialty Conference on Fully Integrated and Automated Project Processes (FIAPP)* (Virginia, USA, Sep. 26-29, 2001).
- C6. Chang, H. E., **Christodoulou, S.** and Griffis, F.H. (2001). "Improving the Construction Project Process by a Collaborative Construction Information System (CCIS) - An Approach to Integrating Construction Systems in FIAPP". Proceedings, *2001 ASCE Conference on Computing in Civil Engineering, Specialty Conference on Fully Integrated and Automated Project Processes (FIAPP)* (Virginia, USA, Sep. 26-29, 2001).
- C5. Chen, S. M., **Christodoulou, S.** and Griffis, F.H. (2001). "Four-Dimensional Computer Models and Simulation for the Support of the Fully Integrated and Automated Project Process". Proceedings, *2001 ASCE Conference on Computing in Civil Engineering, Specialty Conference on Fully Integrated and Automated Project Processes (FIAPP)* (Virginia, USA, Sep. 26-29, 2001).



- C4. Griffis, F.H., Chang, H., **Christodoulou, S.**, and Fei, M. (2001). “N-Dimensional CONstruction Management Information System (nDCON) - An Approach to Integrating Construction Systems in FIAPP”, Proceedings, *Second Civil Engineering Conference in the Asian Region (CECAR)*, organized by the Asian Civil Engineering Coordinating Council and co-sponsored by ASCE (Tokyo, Japan, April 2001).

## 2000

- C3. **Christodoulou, S.** (2000). “Integrated Computer-Aided Monitoring, Management and Maintenance of Civil Infrastructure”. Proceedings, *2000 ASCE Eighth International Conference on Computing in Civil & Building Engineering* (California, USA, Aug. 14-17, 2000), pp.580-587.
- C2. **Christodoulou, S.** (2000). “The Science in Human Intuition: Optimum Bid Markup Calculation in Competitive Bidding Environments Using Probabilistic Neural Networks”. Proceedings, *2000 ASCE Eighth International Conference on Computing in Civil & Building Engineering* (California, USA, Aug. 14-17, 2000), pp. 574-579.

## 1999

- C1. **Christodoulou, S.** (1999). “Integrated Computer-Aided Track Monitoring and Maintenance of Automated People Movers: A Case Study”. Proceedings, *Second International Conference, Railway Engineering '99* (London, UK, May 1999).

The paper received the Engineering Technics Press “1999 Research Award”.

### Referred Conference Proceedings (In Review)

(Review Criteria include (1) At Least Two Reviewers and (2) the Opportunity to Implement Corrections)

- CR6. Kyriakou, C., **Christodoulou, S.E.** and Dimitriou, L. (2016). “Roadway Pavement Anomaly Detection and Classification by use of Smartphones and Artificial Intelligence”. Proceedings, *World Conference on Pavement and Asset Management [WCPAM2017]* (Milan, Italy, Jun. 12-16, 2017).
- CR5. Hadjidemetriou, G. and **Christodoulou, S.E.** (2016). “Patch Defects Detection for Pavement Assessment, using Smartphones and Support Vector Machines”. Proceedings, *Eleventh European Conference on Product and Process Modeling [ECPPM 2016]* (Limassol, Cyprus, Sep. 6-9, 2016).
- CR4. Kyriakou, C. and **Christodoulou, S.E.** (2016). “Roadway Pavement Anomaly Classification Utilizing Smartphones and Artificial Intelligence”. Proceedings, *Eleventh European Conference on Product and Process Modeling [ECPPM 2016]* (Limassol, Cyprus, Sep. 6-9, 2016).
- CR3. Kourti, E., Christodoulou, C., Agathokleous, A. and **Christodoulou, S.E.** (2016). “Waterloss Detection in Streaming Water Meter Data Using Hierarchical Temporal Memory”. Proceedings, *Eleventh European Conference on Product and Process Modeling [ECPPM 2016]* (Limassol, Cyprus, Sep. 6-9, 2016).
- CR2. Christodoulou, C., Hadjidemetriou, M., Agathokleous, A. and **Christodoulou, S.E.** (2016). “Topological Robustness and Vulnerability Assessment of Water Distribution Networks”. Proceedings, *Eleventh European Conference on Product and Process Modeling [ECPPM 2016]* (Limassol, Cyprus, Sep. 6-9, 2016).

- CR1. Georgiou, C., **Christodoulou, S.E.**, and Vamvatsikos, D. (2016). “Damage Assessment and Time-to-Repair Scheduling for Post-Earthquake Reinforced Concrete Building Rehabilitation using BIMs”. Proceedings, *Eleventh European Conference on Product and Process Modeling [ECPPM 2016]* (Limassol, Cyprus, Sep. 6-9, 2016).

### Significant Technical Reports and Other Publications

- O8. **Christodoulou, S.**, Xanthos S., Chari A., Georgiou C., Toxqui E. (2014). “ISES Deliverable D12.2: Stochastic modelling approaches for holistic analysis of the energy performance of buildings”. *Technical Report*, ISES/D12.2, published by the ISES Consortium, Brussels.
- O7. **Christodoulou, S.**, Xanthos S., Kranioti S., Toxqui E., Chari A. (2014). “ISES Deliverable D12.1: BIM extension for stochastic modelling”. *Technical Report*, ISES/D12.1, published by the ISES Consortium, Brussels.
- O6. **Christodoulou, S.**, Agathokleous, A., Kranioti, S., Xanthos, S. and Gagatsis, A. (2012). “Wireless Sensors for Leak Detection and Automatic Meter Reading (AMR)”. *Technical Report*, NIREAS-IWRC/D5.15.1, published by the Nireas International Water Research Center.
- O5. **Christodoulou, S.**, Agathokleous, A., Kranioti, S., Xanthos, S. and Gagatsis, A. (2012). “Analytical and Numerical Models for the Risk-of-Failure Analysis of Urban Water Distribution Network Components”. *Technical Report*, NIREAS-IWRC/D5.14.2, published by the Nireas International Water Research Center.
- O4. **Christodoulou, S.** (2008). “Sustainable Management of Urban Water Distribution Systems”. *Technical Report*, published by the University of Cyprus under the “Academia and Society initiative”.

**The Report received a written praise by the President of the Republic of Cyprus (31/07/08).**

- O3. **Christodoulou, S.**, Griffis, F.H., Barrett, L. and Okungbowa, M. (2004). “Qualifications-Based Selection (QBS)”. *Technical Report*, published by the New York Association of Consulting Engineers Inc. (NYACE), and the New York Building Congress.

**The Report and an accompanying expert-witness testimony at New York City’s City Hall (2002) constituted the pillars on which New York City’s legislation on QBS was passed (2007).**

- O2. **Christodoulou, S.**, Ellinas, G. and Agathokleous, A. (2008). “Improvements in Traffic-Load Management for the University of Cyprus and the Greater Nicosia Area”. *Technical Report*, published by the University of Cyprus.
- O1. **Christodoulou, S.** (1998). “Optimum Bid Markup Calculation in Competitive Bidding Environments Using Fuzzy Artificial Neural Networks”. *Ph.D. Thesis*, Columbia University in the City of New York.

### Academic Advising (Principal Adviser or Co-Adviser)

#### Ph.D. Level - Graduated

- P7. Agathokleous, A. (2015). Sensor-Based Sustainable Management of Urban Water Distribution Networks Utilizing Survival Analysis Modeling (Major Adviser: S. Christodoulou; Construction Management; Expected Dec. 2014).
- P6. Georgiou, C. (2013). Damage assessment, repair scheduling and visualization for post-earthquake building rehabilitation, University of Cyprus (Co-Adviser with Dr. D. Vamvatsikos).
- P5. Michaelidou-Kamenou, A. (2010). A Unified Entropy Theory for the Management of Construction, University of Cyprus (Major Adviser: S. Christodoulou; Construction Management).
- P4. Aslani, P. (2007). Dynamic Resource-Constrained Scheduling, NYU Polytechnic, New York City (Major Adviser: S. Christodoulou; Construction Management). Currently a BIM Engineer with Turner Construction New York, and a Research Associate at Polytechnic Institute of New York.
- P3. Vanrenterghem-Raven, A. (2003). Water Distribution Infrastructure Management System, NYU Polytechnic, New York City (Major Advisers: I. Juran/F. H. Griffis/S. Christodoulou; Construction Management). Currently a Research Assistant Professor at Polytechnic Institute of New York.

#### Ph.D. Level - In Progress

- P2. Kyriakou, C. (201x). Robustness of Roadway Transport Networks and Entropy-Based Optimization of their Operations and Maintenance (Major Adviser: S. Christodoulou; Construction Management; Expected May 2016).
- P1. Hadjidimitriou, G. (201x). Artificial Intelligence and Automatic Generation of Building Information Models (Major Adviser: S. Christodoulou; Construction Management; Expected May 2018).

#### M.Sc. Level - Graduated

- S34. Chari, A. (2015). Stochastic Assessment and Energy Predictive Tools, University of Cyprus.

**Mr. Chari, with the aforementioned research thesis, was subsequently the winner of Cyprus's national competition of the Institution of Engineering and Technology (EIT) Young Professionals Global Challenge (March 2015), representing Cyprus at the Regional Finals.**

- S33. Christoforou, C. (2014). A GIS-Based Decision Support System for Roadway Condition Assessment and Prioritization of Works in Roadway Networks, University of Cyprus.
- S32. Gartzonikas, C. (2014). Entropy-Based Impact Assessment of Roadway Closures for Optimizing the Operations and Maintenance of Roadway Networks, University of Cyprus.
- S31. Menoikiotou, M. (2012). Analysis and Productivity Improvements in Roadway Operations Using Stroboscope Simulator, University of Cyprus.
- S30. Koukoutsaki, A. (2012). Spatial Modeling and Social Interaction Simulation for Energy Efficiency Studies, University of Cyprus.

- S29. Georgiou, C. (2009). Damage assessment, repair scheduling and visualization for post-earthquake building rehabilitation, University of Cyprus (Co-Adviser).
- S28. Hadjikleanthous, K. (2009). FIAPP for public works: the case of Larnaca's International Airport, University of Cyprus.
- S27. Apostolides, S. (2008). DBMS for automated generation of health and safety plans, Democritus University of Thrace, Greece.
- S26. Galaras, C. (2008). A bid-unbalancing method using entropy-minimization, Democritus University of Thrace, Greece.
- S25. Tezias, E. (2008). Resource-constrained scheduling and simulation of entropy effects on project duration and cost, Democritus University of Thrace, Greece.
- S24. Seroglou, D. (2007). Simulation of construction works, Democritus University of Thrace, Greece.
- S23. Deligianni, A. (2006). A risk analysis framework for urban water distribution networks and a "repair and/or replacement" decision support system using neurofuzzy networks, Democritus University of Thrace, Greece.
- S22. Tairis, I. (2005). FIAPP-based ERP software application development for usage by construction enterprises, Democritus University of Thrace, Greece.
- S21. Fisenne, R. (2004). GIS-based risk analysis of water mains, NYU Polytechnic, New York City.
- S20. Palmo, R. (2004). Application of 4D technology in building construction a case study, NYU Polytechnic, New York City.
- S19. Fairweather, G. (2004). Resource maximization by means of global positioning systems and intranet/SQL server integration, NYU Polytechnic, New York City.
- S18. Aslani, P. (2003). Hazard rate modeling risk analysis of water mains, NYU Polytechnic, New York City.
- S17. Cleary, J. (2003). A comparison of fixed numbers, probability distributions and neural networks for estimating construction productivity, NYU Polytechnic, New York City.
- S16. Balda, C. (2003). The downtown path restoration: a design-built net-cost project, NYU Polytechnic, New York City.
- S15. Lvobskiy, Y. (2003). Software defects in construction: legal issues and possible alternatives, NYU Polytechnic, New York City.
- S14. Sehic, A. (2003). Implementation of a 4D-CAD technology: the Myrtle/Wyckoff Station Complex (NY), NYU Polytechnic, New York City.
- S13. De Los Rios, J. C. (2003). Application of 3D modeling in underground construction a case study, NYU Polytechnic, New York City.
- S12. Gorgoglione, G. (2002). A prediction model for water-main breaks in urban environments, NYU Polytechnic, New York City.
- S11. Mow, M. (2003). Analysis of pedestrian and vehicular traffic requirements for the reconstruction of the Myrtle-Wyckoff Avenue Subway Stations, NYU Polytechnic, New York City.
- S10. Nawlo, O. (2002). 4D simulation tools, NYU Polytechnic, New York City.
- S9. Huthofer, P. (2002). Modeling and simulation of construction systems using petri nets, NYU Polytechnic, New York City.
- S8. Leo, R. (2001). Non-destructive testing of concrete, NYU Polytechnic, New York City.
- S7. Kim, S. (2001). Simulation tools in the management of construction, NYU Polytechnic, New York City.

- S6. Aideyan, A. (2001). Application of Stroboscope and Simphony simulation in the management of construction, NYU Polytechnic, New York City.
- S5. Christodoulou, E. (2001). Thin-client technology in construction management, NYU Polytechnic, New York City.
- S4. Tanzi, D. (2000). Cost-loaded critical path analysis and associated analysis of risk on the concurrent construction of two firehouses, NYU Polytechnic, New York City.
- S3. Dely, L. (2000). Total Quality Management; British Airways redevelopment project at the JFK International Airport, NYU Polytechnic, New York City.

**M.Sc. Level - In Progress**

- S2. Kourti, E. (201x). Development of City-wide Building Information Models for Smart-City Transportation Applications, University of Cyprus.
- S1. Christodoulou, C. (201x). Development of City-wide Building Information Models for Smart-City Construction and Building-Energy Applications, University of Cyprus.

**M.Eng. Level - Graduated**

- E19. Ellinas, N. (2015). Energy efficiency of buildings - Economic evaluation of construction alternatives, University of Cyprus.
- E18. Christou, D. (2014). Construction contracts and appraisal of construction claims, University of Cyprus.
- E17. Rossou, A. (2013). The effects of Cyprus's financial crisis on the construction sector, University of Cyprus.
- E16. Kourtellou, D. (2013). GIS-based traffic load analysis of UCy's student body, University of Cyprus.
- E15. Thrasyvoulou, A. (2013). Roadway operations and maintenance optimization, University of Cyprus.
- E14. Kanellides, L. (2013). BIM-based quantity takeoff Case study: UCy's School of Engineering, University of Cyprus.
- E13. Giorkas, G. (2013). BIM-based cost estimation - Case study: UCy's School of Engineering, University of Cyprus.
- E12. Konatzi, A. (2013). BIM-based scheduling - Case study: UCy's School of Engineering, University of Cyprus.
- E11. Neophytou, N. (2012). UCY's School Of Engineering - Project planning and risk analysis, University of Cyprus.
- E10. Liasidis, P. (2012). Santa Barbara Hills Park - Project planning and risk analysis, University of Cyprus.
- E9. Aniftos, M. (2012). GIS-based risk assessment for forestry fires, University of Cyprus.
- E8. Alexoglou, V. (2012). Construction claims and Cyprus's legal system, University of Cyprus.
- E7. Christodoulou, S. (2011). Cyprus's legal framework for construction contracts, University of Cyprus.
- E6. Karamanis, M. (2010). FIAPP-based system for competitive bidding, University of Cyprus.
- E5. Papadopoulou, C. (2009). GIS-based optimization of leak-detection sensor placement, University of Cyprus.

- E4. Georgiou, A. (2009). Review of Cyprus's legal framework on construction claims, University of Cyprus.
- E3. Michael, E. (2009). Mitigation measures for construction claims in public works, University of Cyprus.
- E2. Michael, M. (2008). Design and management of urban wastewater distribution networks, University of Cyprus.
- E1. Hadjichristou, E. (2008). GIS-based vulnerability assessment of Larnaca's wastewater distribution network, University of Cyprus.

## Referee and Review Activities

### Scientific journals refereed <sup>7</sup>

#### American Society of Civil Engineers (ASCE)

- Construction Engineering and Management (IF: 0.876)
- Computing in Civil Engineering (IF: 1.268)
- Infrastructure Systems (IF: 0.983)
- Management in Engineering (IF: 0.720)
- Professional Issues in Engineering Education and Practice (IF: 0.439)
- Pipeline Systems Engineering and Practice (IF: 0.439)
- Aerospace Engineering (IF: 0.778)

#### Elsevier

- Automation in Construction (IF: 1.820)
- Computers and Structures (IF: 1.509)
- European Journal of Operational Research (IF: 2.038)
- Reliability Engineering & System Safety (IF: 2.038)
- Advances in Engineering Software (IF: 1.220)
- Applied Mathematical Modeling (IF: 1.706)
- Applied Mathematics and Computation (IF: 1.600)
- International Journal of Approximate Reasoning (IF: 2.451)

#### Taylor and Francis

- Construction Management and Economics
- Civil Engineering and Management
- Civil Engineering and Environmental Systems (IF: 0.447)
- Urban Water Journal (IF: 1.190)

#### Springer

- Environmental Science and Pollution Research (IF: 2.828)
- Water Resources Management (IF: 2.259)
- Structural and Multidisciplinary Optimization (IF: 1.728)
- European Water
- Environment, Development and Sustainability
- Grid Computing (IF: 1.603)
- Arabian Journal for Science and Engineering (IF: 0.385)

#### Emerald

- Civil Engineering and Environmental Systems (IF: 0.477)

#### International Water Association (IWA)

- Journal of Hydroinformatics (IF: 1.388)
- Water Science and Technology (IF: 1.102)
- Water Supply: Research and Technology - AQUA (IF: 0.573)

#### Institute of Electrical and Electronics Engineers (IEEE)

- Transactions on Computers (IF: 1.379)

<sup>7</sup>Listed also, where available, are the Journal Citation Reports' Impact Factors (IF) for 2012

Desalination Publications

- Desalination and Water Treatment (IF: 0.852)

Inderscience

- International Journal of Project Organization and Management

ITCon

- Information Technology in Construction

Association for Computing Machinery (ACM)

- ACM Transactions on Sensor Networks (IF: 1.440)

Wiley

- Project Management Journal (IF: 0.767)

Academic Journals

- African Journal of Agricultural Research (IF: 0.263)

South African Water Research Commission

- Water SA (IF: 0.876)

Korean Society of Environmental Engineers

- Environmental Engineering Research (IF: 0.197)

The Chinese Research Institute of Construction Management

- International Journal of Construction Management (IJCM)

Hindawi Publishing Corporation

- Scientific World Journal (IF: 1.730)
- Mathematical Problems in Engineering (IF: 0.762)

Maejo International

- Science and Technology (IF: 0.460)

Whioce Publishing

- Journal of Smart Cities (IF: -)

Conferences Refereed

- Mediterranean Electrotechnical Conference [IEEE MELECON] (2016)
- International Conference on Efficient & Sustainable Water Systems Management toward Worth Living Development [EWaS] (2016)
- European Conference on Product & Process Modelling [ECPPM] (2012, 2014, 2016)
- European Water Resources Association's International Conference [EWRA] (2009, 2011)
- International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering (2005, 2007)



- International Conference on Civil, Structural and Environmental Engineering Computing [CC] (2009, 2013)
- International Conference on Computing in Civil and Building Engineering [ICCCBE] (2012)
- International Conference on Construction Applications of Virtual Reality [CONVR] (2011)
- International Conference on Improving Efficiency of Water Systems in a Changing Natural and Financial Environment [EWaS-MED] (2013)
- International Conference in Project Management [IPMA-PM] (2008, 2010)
- International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (2009, 2011, 2013)
- International Conference on Sustainable Buildings (2013)
- International Conference on Sustainable Design and Construction (2011)
- International Conference on Sustainable Design, Engineering, and Construction [ICSDC] (2012)
- International Conference on Sustainability and the Future (2010)

#### Granting Agencies Refereed

- European Science Foundation [ESF] (2014)
- Portugal's Fundao para a Cincia e a Tecnologia [FCT] (2014)
- KY Science and Engineering Foundation (2014)
- Qatar National Research Fund (2013, 2014)
- Hellenic Quality Assurance and Accreditation Agency [HQAA] (2013, 2014)
- European Cooperation in Science and Technology (COST) Transport and Urban Development Domain [COST/TUD] (2008-2013)
- Cyprus Research Promotion Foundation [CyRPF] (2009, 2011)
- USA's National Science Foundation [NSF] (2000, 2001)

#### Academic Evaluator - Institutional Evaluation

- Hellenic Quality Assurance and Accreditation Agency
- Aristotle University of Thessaloniki, Greece
- Technical University of Piraeus, Greece

#### Academic Evaluator - Academic Staff Evaluation

- Democritus University of Thrace, Greece
- University of the Aegean, Greece
- Aristotle University of Thessaloniki, Greece

#### Scientific Committees - Editorial Boards

- Member, Scientific Committee, 2nd EWaS-MED International Conference on Efficient & Sustainable Water Systems Management toward Worth Living Development, Chania, Greece, June 1-6, 2016.
- Member, Scientific Committee, 11th European Conference on Product & Process Modelling [ECPPM-2016], Limassol, Cyprus, Sep. 7-9, 2016.
- Member, Scientific Committee, 16th International Conference on Computing in Civil and Building Engineering [ICCCBE-2016], Osaka, Japan, Jul. 6-8, 2016.
- Member, Scientific Committee, 10th European Conference on Product & Process Modelling [ECPPM-2014], Vienna, Austria, Sep. 17-19, 2014.

- Member, Scientific Committee, 1st EWaS-MED International Conference on Improving Efficiency of Water Systems in a Changing Natural and Financial Environment, Thessaloniki, Greece, April 11-13, 2013.
- Member, Scientific Committee, International Conference on Sustainable Buildings [SB-13], Cairo, Egypt, November 5-7, 2013.
- Member, Scientific Committee, Third International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering [CC2013], Cagliari, Sardinia, Italy, Sep. 3-6, 2013.
- Member, Scientific Committee, Fourteenth International Conference on Civil, Structural and Environmental Engineering Computing [CC2013], Cagliari, Sardinia, Italy, Sep. 3-6, 2013.
- Member, Scientific Committee, 2012 International Conference on Sustainable Design, Engineering, and Construction [ICSDC 2012], Fort Worth TX, USA, Nov. 7-9, 2012.
- Member, Scientific Committee, Fourteenth ICCCB, Moscow, Russia, Jun. 27-29, 2012.
- Member, Scientific Committee, Ninth International Conference on Product and Process Modelling [ECPPM-2012], Reykjavik, Island, Jul. 25-27, 2012.
- Member, Scientific Committee, Eleventh International Conference on Construction Applications of Virtual Reality 2011 [convr2011], Weimar, Germany, Nov. 3-4, 2011.
- Member, Scientific Committee, European Water Resources Association's Sixth International Symposium on Water Engineering and Management in a Changing Environment, Catania, Sicily, Jun. 29-Jul. 02, 2011.
- Member, Scientific Committee, International Conference on Sustainable Design and Construction, Kansas City, Missouri, USA, March 23-25, 2011.
- Member, Scientific Committee, The Second International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering, Chania, Crete, September 6-9, 2011.
- Member, Scientific Committee, First International Conference on Sustainability and the Future, Cairo, Egypt, November 23-25, 2010.
- Member, Scientific Committee, International Project Management Association's PM-05 International Conference in Project Management, Greece, May 29-31, 2010.
- **Chair and Host**, Scientific Committee, European Water Resources Associations Seventh International Conference on Water Resources Conservation and Risk reduction Under Climatic Instability, Cyprus, Jun. 25-27, 2009.
- **Guest Editor**, Journal of Water Resources Management, Special Issue on EWRA2009. Springer, UK.
- **Host**, ESF/COST Domain Committee on Transport and Urban Development, Pissouri, Cyprus, Sep. 7-8, 2009.
- Member, Scientific Committee, The Twelfth International Conference on Civil, Structural and Environmental Engineering Computing [CC09], Funchal, Madeira Island, Sep. 1-4, 2009.
- Member, Scientific Committee, The First International Conference on Soft Computing in Civil, Structural and Environmental Engineering Computing [CC09], Funchal, Madeira Island, Sep. 1-4, 2009.
- Member, Scientific Committee, International Project Management Associations First Mediterranean Conference on Project Management [IPMA], Greece, May 29-31, 2008.
- Member, Scientific Committee, The Ninth International Conference On the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering, St. Julians, Malta, Sep. 18-21, 2007.
- Member, Scientific Committee, The Eighth International Conference On the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering, Rome, Italy, Aug. 30 - Sep. 02, 2005.

Conference Session Chair

- Civil-Comp, The Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing (CC2015), Prague, Czech Republic, Sep. 1-4, 2015.
- ITSCyprus, The Third Cyprus Sustainable Mobility and Intelligent Transport Conference (Sustainable Mobility Cyprus 2015), Nicosia, Cyprus, May 11-12, 2015.
- ITSCyprus, The Second Cyprus Sustainable Mobility and Intelligent Transport Conference (Sustainable Mobility Cyprus 2013) (Nicosia, Cyprus, Dec. 3-4, 2013).
- Civil-Comp, The Second International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (CSC2011), Chania, Crete, Sep. 18-21, 2011.
- European Water Resources Association, Eighth International Symposium on Water Engineering and Management in a Changing Environment, Catania, Italy, Jun. 29- Jul. 2, 2011.
- European Water Resources Association, Seventh International Conference on Water Resources Conservation and Risk reduction Under Climatic Instability, Cyprus, Jun. 25-27, 2009.
- Civil-Comp, Ninth International Conference On the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering (AICC07), St. Julians, Malta, 18-21 Sep. 18-21, 2007.
- Civil-Comp, Eighth International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering (AICC05), Rome, Italy Aug. 30 - Sep. 02, 2005.
- The Fifth International Conference on Management of Technological Changes (MTC 2007), Alexandroupolis, Greece, Aug. 25-26, 2007.
- European Water Resources Association, International Conference on Water Resources Management New Approaches and Technologies, Chania, Crete, Jun. 14-16, 2007.
- Scientific and Technical Chamber of Cyprus (ETEK), Workshop on Forensic Engineering, Nicosia, Cyprus, Feb. 3-4, 2006.
- ASCE, International Conference on Computing in Civil Engineering, Cancun, Mexico, Jul.12- 15, 2005.

Invited Lectures and Seminars

- 2009 May 18 *University of Cyprus*  
*"Cyprus's water scarcity problem"*, Logos & Antilogos public seminar series (Nicosia, Cyprus).
- 2009 Jan. 14 *The Open University of Cyprus*  
*"Sustainable management of water distribution networks"*, Invited lecture at the Open University of Cyprus (Nicosia, Cyprus).
- 2008 Dec. 15 *Strategic Workshop for Addressing the Water Shortage Problem in Cyprus*  
*"Sustainable management of urban piping networks"*, Keynote presentation at Cyprus's Water Development Department's strategic workshop on water management, efficiency and sustainability (Nicosia, Cyprus).
- 2008 Nov. 27 *Global Water Efficiency 2008*  
*"Striving for efficiency in managing urban water distribution networks"*, Keynote presentation at IWA's Global Water Efficiency workshop (Limassol, Cyprus).
- 2006 Oct. 18 *Bentley Microsystems, Inc.*  
*"New methods in effective project management - Fully integrated and automated project processes"*, Keynote presentation at Bentley's workshop on building information models (BIM) (Nicosia, Cyprus).

- 2006 Aug. 01 *Naresuan University, Thailand*  
*"Integrated water distribution network risk assessment and management"*, Invited lecture, Naresuan University, Phitsanulok, Thailand.
- 2005 Nov. 05 *Cyprus Association of Civil Engineers (SPOLMIK)*  
*"Health and safety in the construction industry An academic's perspective"*, Keynote presentation at SPOLMIK's workshop on health and safety at construction sites (Nicosia, Cyprus).
- 2002 Oct. *Metropolitan Transit Authority, New York City*  
*"Fully integrated and automated project processes"*, Invited lecture at the Second Ave. Subway Project on 3D/4D technologies (New York City, U.S.A.).
- 2001 Fall *Columbia University, New York City*  
 Guest lecturer at Columbia University on topics related to Construction Engineering and Management (New York City, U.S.A.).
- 2001 May *Columbia University, New York City*  
 Presenter at the New York City Science/Technology Forum for High School Students (New York City, U.S.A.).

## Outreach Activities

### Television

- 2008 Oct. 08 *Cyprus Broadcasting Corporation, CyBC1 TV Station. "The Transportation Problem in Nicosia Solution Measures"*  
 20-minute TV interview on the "Epta - Dekka" news magazine, televised live.  
[http://www.eng.ucy.ac.cy/schristo/media/2008Oct08\\_EptaDeka.wmv](http://www.eng.ucy.ac.cy/schristo/media/2008Oct08_EptaDeka.wmv)
- 2009 Apr. 09 *Mega TV Station. "Sustainable management of water distribution networks"*  
 15-minute one-on-one TV interview on the Me Mia Matia news magazine, televised live.  
[http://www.eng.ucy.ac.cy/schristo/media/2008Apr09\\_MeMiaMatia.wmv](http://www.eng.ucy.ac.cy/schristo/media/2008Apr09_MeMiaMatia.wmv)
- 2009 Mar. 29 *Ant1 TV Station. "The problem of water in Cyprus"*  
 10-minute TV interview on the Mera Mesimeri news magazine, televised live.  
[http://www.eng.ucy.ac.cy/schristo/media/2008Mar31\\_MeraMesimeri.wmv](http://www.eng.ucy.ac.cy/schristo/media/2008Mar31_MeraMesimeri.wmv)

### Radio

- 2008 Aug. 05 *Cyprus Broadcasting Corporation, CyBC1 Radio Station. "The Transportation Problem in Nicosia Solution Measures"*  
 90-minute discussion on radio, broadcasted live.
- 2008 Apr. 11 *Logos Station. "Water issues in Cyprus"*  
 60-minute one-on-one radio interview, broadcasted live.

### In The News

#### (Newspapers/Periodicals/Internet)

- 2011 Mar. 06 *Phileleftheros Newspaper. "Sustainable Management of Urban Water Distribution Networks Automatic Meter Reading (AMR)"*  
 Article about the development of an AMR platform.

- 2010 Mar. 31 *Ipsipetis*. “*The Water Problem*”  
Scientific commentary/article about the sustainable management of water distribution networks (ISSN 1986-0218, vol.30, p. 10).
- 2008 Sep. 15 *Phileleftheros Newspaper*. “*30% water loss due to pipe leaks*”  
Article about the publication by UCY of the report on sustainable management of water distribution networks.
- 2008 Aug. 14 *Phileleftheros Newspaper*. “*Leaks in the water savings - Millions in tonnage and euro buried in the soil*”  
Article about the increase in water leak incidents as a result of the imposed emergency water supply curtailments, and about Christodoulou et al.’s research work on water loss in urban water distribution networks.
- 2008 Apr. 13 *Politis Newspaper*. “*Water Lost The problematic status of urban water distribution networks*”  
Article about Christodoulou et al.’s research work on water loss and the mitigation of the water-leak problem found in urban water distribution networks.
- 2007 Nov. 12 *Phileleftheros Newspaper*. “*This is how the water loss problem will be solved - The University of Cyprus takes action on water leaks*”  
Article about Christodoulou’s team’s efforts on water loss management in Cyprus.
- 2007 May 21 *Phileleftheros Newspaper*. “*Cypriot Professor Impacts New York City Law*”  
Front page article about the impact of Christodoulou et al.’s QBS study on the passing of a law in New York City regarding qualifications-based selection of architectural and engineering services.
- 2007 May 13 *Politis Newspaper*. “*A Cypriot professor’s success his research study and suggestions passed into law in the U.S.A.*”  
Article about Christodoulou et al.’s research study on QBS and the eventual passing of their recommendations into law in New York City.  
([http://www.poly.edu/news/\\_doc/article\\_87/qbs.pdf](http://www.poly.edu/news/_doc/article_87/qbs.pdf);  
<http://www.nysqbs.org/downloads/Polytechnic.pdf>)
- 2007 Mar. *Polytechnic University*. “*NYU-Poly Helps Initiate NYC Quality-Based Selection Policy*”  
Article about the impact of the report by Christodoulou et al. on QBS and the impact the report had on the decision by New York City’s Procurement Policy Board (Dec. 1, 2006) to pass a QBS policy based on the research and testimony provided by the research team.  
([http://www.poly.edu/poly\\_ebriefs/March07/](http://www.poly.edu/poly_ebriefs/March07/))
- 2007 Feb. 01 *Polytechnic University*. “*Research at Poly leads to NYC Policy for Better Buildings*”  
Article about the impact of the report by Christodoulou et al. on QBS and the impact the report had on the decision by New York City’s Procurement Policy Board (Dec. 1, 2006) to pass a QBS policy based on the research and testimony provided by the research team.  
([http://www.poly.edu/poly\\_ebriefs/March07/](http://www.poly.edu/poly_ebriefs/March07/))
- 2003 Dec. 15 *American Council of Engineering Companies of New York (ACEC), New York Real Estate Journal*. “*A closer look at the procurement process known as Qualifications-Based Selection*”

Article about QBS and the study by Christodoulou et al.

(<http://www.nysqbs.org/resources.asp>)

- 2003 *American Council of Engineering Companies. "Building Quality into New York City's Future: The Case for Quality-Based Selection"*  
Article about Christodoulou et al.'s work on QBS.

- 2002 Jun. 03 *Engineering News Record, ENR. "Researchers Challenged to Improve Construction"*  
Article about the work done at Polytechnic University (Brooklyn, NY) by Griffis, Christodoulou and their students on FIAPP and 3D/4D computer modeling for Polytechnic's new academic building and dormitory, and New York Transit's Myrtle/Wyckoff Avenue Subway Station.  
(<http://enr.construction.com/features/technologyconst/archives/020603a.asp>)