# CONTACT

Name:	Jonathan Jingsheng Shi, Ph.D., PE, Professor			
	Art E. Favre Endowed Chair			
Address:	Bert S. Turner Department of Construction Managemen			
	College of Engineering			
	Louisiana State University			
	3134B Patrick F. Taylor Hall			
	Baton Rouge, LA 70803			
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	E-mail: jshi@lsu.edu			

### **EDUCATION**

9.1992	8.1995	Ph.D.	University of Alberta, Canada
9.1982	5.1985	M.Sc.	Wuhan University, China
9.1978	8.1982	B.Sc.	Wuhan University, China

## EMPLOYMENT

8.2014-present	Art E. Favre Endowed Chair	Louisiana State University (LSU)
8.2011 8.2014	Holland Professor	University of Florida
8.2008 8.2011	Professor and Chair	University of Nebraska Lincoln (UNL)
4.2007 8.2008	Professor and Director	Illinois Institute of Technology, Chicago
4.2001 4.2007	Assoc. Professor (Tenured)	Illinois Institute of Technology
8.1999 4.2001	Assoc. Professor (Tenure track)	Illinois Institute of Technology
1.1999 8.1999	Associate Professor	City University of Hong Kong
8.1995 12.1998	Assistant Professor	City University of Hong Kong
9.1992 8.1995	Research Associate	University of Alberta, Canada.
5.1985 8.1992	Lecturer	Wuhan University, China.

# FUNDED RESEARCH PROJECTS (IN CHRONOLOGICAL ORDER)

(2 years)

## 2. Rinker Ph.D. Research Fellowship

Role: PI (open competition for a fully funded PhD student for 4 years)
Amount:\$128,000 (\$32,000 per year for four years)
Source: Rinker Foundation and College of Design, Construction and Planning
Period: 9/1/2012 8/30/2016 (4 years)

#### 3. Energy Efficiency in Buildings

Role: PI (new faculty startup support)
Amount:\$100,000 (\$20,000 per year for 5 years)
Source: University of Florida
Period: 9/1/2011 8/30/2016 (5 years)

#### 4. Building Energy Efficient Homes for America (BeeHa), Building America Program (BA)

Role: Team Lead and PI with Co-PIs from UNL, University of Florida, and 15 industry partners
Amount:\$660,345
Source: US Department of Energy (US DOE)
Period: 9/1/2010 8/30/2012

5. State Energy Sector Partnership and Training Grant

Role: co-PI with the Nebraska Department of Labor (NDOL)
Amount:\$4,830,000
Source: US Department of Labor (US DOL)
Period: 9/1/2010 8/30/2012

## 6. Advanced Decentralized Water/Energy Network Design for Sustainable Infrastructure

Role: PI with eight co-PIs from four academic units at UNL

Amount:\$1,250,000

Source: US Environmental Protection Agency (US EPA)

Period: 7/1/2009 6/31/2014

#### 7. Highway Work Zone Safety Audit Guidelines Development and Training

Role: PI with co-PIs from the Illinois Department of Transportation (IDOT) and Utah LTAP Amount:\$1,032,617 (\$750,000 from FHWA and \$282,618 from the participants)
Source: Federal Highway Administration (FHWA)
Period: 9/1/2006 8/30/2010

8.

35. Arditi, D., M.A. Ayrancioglu, and J. Shi

ASCE, Journal of Transportation Engineering. Vol. 130(6), 725-732.

- 34. Shi, J. (2004) Clustering technique for evaluating and validating neural network performance <u>ASCE Journal of Computing in Civil Engineering</u>, vol. 16(2). Discussion by M. Marzouk and O. Moselhi. Closure by J. Shi. 183-184.
- 33. Shi, J.

ASCE Journal of Construction Engineering and Management,

15. Shi, J Construction Management and Economics. Vol. 17(4), 463-471.
<ol> <li>Ortigao, J. A. R. and J. Shi (1998). <sup>3</sup>Predicting settlements during tunnelling through neural networks." <u>Tunnels &amp; Tunnelling International</u>. Vol. 30(12), 30-31.</li> </ol>
<ul> <li>13. Shi, J., J.A.R. Ortigao and J. Bai (1998         <u>ASCE Journal of Geotechnical and Geoenvironmental Engineering</u>. Vol. 124(5), 389-395.     </li> </ul>
12. Shi, Jprocess models for simulating pi <u>Construction Management and Economics</u> . Vol. 16(4), 489-498.
<ul> <li>11. Shi, Jmoving</li> <li>Journal of Computer-Aided Civil and Infrastructure Engineering, vol. 13(2), 121-</li> <li>130.</li> </ul>
10. Shi, J.       - <u>ASCE</u> Journal of Construction Engineering and Management.       Vol. 123(1), 26-33.
9. Shi, J. <u>Engineering Systems through Artificial neural networks</u> . vol. 6. ASME Press Series. 815-820.
<ol> <li>Shi, J. and S. M. AbouRizk. (1995). "An optimization method for simulating large complex systems." <u>Engineering Optimization</u>. Vol. 25(3), 213-229.</li> </ol>
<ol> <li>AbouRizk, S. and Shi, J. (1994). "Automated construction simulation optimization." <u>ASCE</u> <u>Journal of Construction Engineering and Management</u>. Vol. 120(2), 374-385.</li> </ol>
<ol> <li>Shi, J., Bai J. and Xiao H. (1993), "State of the art in construction expert systems." <u>Hydroelectric</u> <u>Techniques</u>. 1993. In Chinese.</li> </ol>
<ol> <li>Shi, J. (1992). "A method combined mathematical analysis and simulation for studying the serial-parallel queuing network systems." <u>Systems EngineeringTheory &amp; Practice</u>. Vol. 6. 38-45. In Chinese.</li> </ol>
4. Shi, J. (1990). "An heuristic method for leveling multiple resources with controlled activities." <u>Systems EngineeringTheory &amp; Practice</u> , vol. 2, 21-25. In Chinese.
<ol> <li>Shi, J. and Xiao H. (1990). "Risk analysis and decision making under multi-objectives on the standard of river diversion during construction." <u>Journal of Hydraulic Engineering</u>. Vol. 11, 66-71. In Chinese.</li> </ol>
<ol> <li>Shi, J. (1989). "The Optimal Rate of Breakdown of Construction Equipment." <u>Journal of the</u> <u>WUHEE</u>. Vol. 5, 166-174. In Chinese.</li> </ol>
<ol> <li>Shi, J., Yuang G. and Zuo J. (1987). "Computer Simulation Study on the Selection of Construction Equipment for Earth-fill Dams." <i>Journal of Hydroelectric Engineering</i>. Vol. 3, 62-73. In Chinese.</li> </ol>
II. Papers Published In Refereed Conference Proceedings (incomplete)
Alahmad, M., Wisam Nader, Adam Brumbaugh, Yong Cho, Song Ci, Hamid Sharif, <b>Jonathan Shi</b> ,
IEEE GCC Conference and Exhibition, pp. 1-4, Dubai, United Arab Emirates, February 19-22, 2011.
Alahmad, M., Wisam Nader, Jill Neal, <b>Jonathan Shi</b> , Chuck Berryman, Y. Cho, Siu-Kit Lau, H. Li, Real Time Power Monitoring &
Integration with BIM ceedings of IECON 2010 - 36th Annual Conference of IEEE Industrial Electronic Society, pp. 2454-2458. Glendale, Arizona, November 7-10, 2010.
Hu M. Zhang T.C. Stanshumy I. Dahah M. Shi I. Naal I. Alahmad M. Damuman, C. Li

Hu, M., Zhang, T.C., Stansbury, J., Dahab, M., **Shi, J.**, Neal, J., Alahmad, M., Berryman, C., Li, H., Schwer, A., and Shen, Z. (2011). Treatment of greywater with shredded-tire biofilters and

Zhang, H., Tam, C. M., Shi, J.<br/>construction simulation ssimulation environment for activity-based<br/>Proceedings of the 2000 IASTED International<br/>Banff, Canada. 51-55.

Shi, J. Object-

# III. Research Reports (incomplete)

Li, Z. and J. Shi

#### IV. Courses Taught at IIT (Associate and Full Professor)

- CAE471 Construction Planning and Scheduling
- CAE571 Advanced Construction Scheduling and Control
- CAE572 Construction Cost Accounting and Control
- CAE573 Computer Applications in Construction
- CAE593 Graduate Seminar Series

## V. Courses Taught at CityU (Assistant/Associate Professor)

- BC6592: Construction Management I
- BC7306: Construction Management II
- BC5205: Technical Communication
- BC6100: Decision-making and Operations Research for Engineering Management
- BC6591: Development and Construction Economics
- BC1603: Production Management
- BC9000: Postgraduate Seminars in Building and Construction
- BC1604: Advanced topics in Construction Management

#### INVITED SEMINARS AND LECTURES

1<sup>st</sup> International Symposium on Hydraulic Engineering Simulation and Safety. Keynote address: Data Big or Small an Ultimate Research Challenge. Tianjin University, June 10, 2014.

Qinghua University, Resilient and Sustainable Complex Infrastructural Systems, June 30, 2014.

5<sup>th</sup> University of Florida Symposiums in Science and Engineering. Energy Efficiency in

Topic: IT Applications in the US Construction Industry
Virginia Tech, March 22, 2005
Topic: Integrated Simulation Technology for Planning Building Construction
The Manufacturers ¶ $QQXDO$ & RQIHUHQFOH to DeQ1G, 2000 KLELW
Topic: Computer Simulation for Planning Plant Maintenance
Purdue University, November 14, 1999
Topic: Activity-based Construction Modeling and Simulation
Florida State University, June 14, 1998
Topic: Modeling and Simulation of Construction Operations
University of Buffalo, May 3, 1998
Topic: An Automated Simulation System for Construction
The Hong Kong University of Science and technology, April 17 1998
Topic: Automated Simulation Systems for Construction Planning
Institute of Quarrying, Hong Kong, September 14, 1997
Topic: Computer-aided Quarrying and Crushing Analyses
HKIE: Hong Kong Institution of Engineers, Materials Division, April 8, 1997
Topic: Case study-based computer applications for improving construction planning
Brazil: (Sponsored by the National Research Council of Brazil, June 8 - 16, 1996)
Federal University of Rio de Janeiro
Pontifical Catholic University
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Shanghai Jiaoton University, Tongji University
Wuhan Urban Construction Institute
Wuhan University of Science and Technology
PROFESSIONAL SERVICE
I. Membership

Professional Engineer, Hong Kong Member, Hong Kong Institution of Engineers (HKIE) Member, American Society of Civil Engineers (ASCE) Member, Construction Management Association of America (CMAA)

IE)

Jonathan Shi

**Organizing Committee**, Implementing IT to Obtain a Competitive Advantage in the 21<sup>st</sup> Century (INCITE 2000), January 17-18, 2000. Hong Kong.

Committee member, Construction Research Council, ASCE

Committee member, Computing in Construction, ASCE

Committee member, Chicago Chapter, CMAA

Panelist, National Science Foundation (NSF)

**Reviewer,** National Science Foundation (NSF)

Editorial Board, Journal of Construction Research

Editorial Board, The International Journal of Construction Management

Peer Reviewer, Journal of Construction Engineering and Management, ASCE

Peer Reviewer, Journal of Computing in Civil Engineering, ASCE

Peer Reviewer, Construction Management and Economics

Peer Reviewer, International Journal of Construction Automation

Peer Reviewer, Journal of Computer-Aided Civil and Infrastructure Engineering

Peer Reviewer, Journal of Construction Research

### SCHOLARSHIPS, AWARDS AND HONORS

- Nov. 6, 2006. Featured Article on the Front page of SouthTown Daily News P See the attached copy of the article.
- May 12, 2007: IIT Day on Capital Hill a showcase of the major research activities at the university to the Illinois Congressional Delegation and Staff at the U.S. Congressional Building in Washington D.C. See the attached poster.
- July 2003: <u>Summer Visiting Fellowship</u>. This fellowship was funded by the Department of Building and Real Estate of the Hong Kong Polytechnic University. The recipient was selected from a list of solicited well qualified candidates based on qualifications and submitted proposals.
- 1999-2004: Who's Who in the World, Who in Industry and Finance, in Science and Engineering.
- 1992-1994: <u>University of Alberta Ph.D. Scholarship</u> into a Ph.D. program. Offered for a one-year term with a possible second year renewal pending

May 1994: