

**James Jones Ph.D.**  
*Professor of Architecture*

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***Education and Training:***

<i>Institution</i>	<i>Major/Area</i>	<i>Degree and Year</i>	
University of Michigan (Ann Arbor)	Science/Architecture	BS	1981
University of Michigan (Ann Arbor)	Architecture	March	1983
University of Michigan	Architecture	Ph.D.	1996

***Research and Professional Experience:***

1997 to Present	Professor of Architecture, College of Architecture and Urban Studies, VT
2009 to Present	Coordinator – Ph.D. Program for Design Research, CAUS, VT
2009 to 2010	Senior Faculty Liaison to the Minister of Housing and the Center for Water Desalination and Renewable Energies, Libya. By invitation from the U.S Department of State, Science and Technology Program.
2004 to Present	Director – Center for High Performance Environments, Virginia Tech
2013 to Present	Certified Continuing Education Provider with the American Institute of Architects
1995 to 1996	Co-Director and Principal Investigator for the design, development and construction of the Indoor Environmental Quality Laboratory in the College of Engineering, North Carolina A&T State University
Member	American Institute of Architects
Member	American Society of Heating, Refrigerating and Air Conditioning Eng.

***Awards and Recognition:***

National Scholar Mentor, The U.S. Environmental Protection Agency. One of only two awards presented in tandem with support for graduate student research – Raj Louisnathan. 2005.

**Center of Excellence Award-** The U.S. Environmental Protection Agency and the U.S. Department of Energy. Accepted as Director of the Center for High Performance Learning Environments. 2004.

Certificate of Lecture Coursework Teaching Excellence Award, The College of Architecture and Urban Studies, Virginia Tech, 2007

Certificate of Teaching Excellence, The College of Architecture and Urban Planning's highest teaching award, Virginia Tech. 2002.

Oberdick Fellowship, The University of Michigan, College of Architecture and Urban Planning. 1991

***Selected Publications:***

- 1) J. Jones and Demetri Telionis, *AEROFORM: Designing for wind and air movement*, Routledge – Taylor & Francis Publishing, London, 2022
- 2) J. Jones, *Roofing materials for thermal performance and environmental integration of buildings in Materials for energy efficiency and thermal comfort in buildings*. Chapter publication by invitation from Matthew Hall. Woodhead Publishing, Oxford, UK. pp. 455-483. 2010.

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- 3) Soo Jeong Jo, J. Jones and Francine Battaglia, Validation of Computational Fluid Dynamics (CFD) Platforms for the Early Stages of Architectural Design, PROMETHEUS (the Journal of the Ph.D. Program in Architecture at IIT) – 2020.
- 4) Soo Jeong Jo, and J. Jones, *Teaching CFD as a Pedagogy for Architectural Design*. Short Paper presented at the PLEA (Passive Low Energy Architecture) 2018 International Conference, Hong Kong. 2020.
- 5) Soo Jeong Jo, J. Jones and Elizabeth Grant. *Trends in the application of CFD for architectural design*. Paper presented at the ARCC (Architectural Research Centers Consortium) 2018 International Conference, Philadelphia. 2018.
- 6) Kalua A. and J. Jones, Suitability of the Case Study Research Methodology in Architectural Research. In the Journal of Architecture.  
<https://www.tandfonline.com/loi/rjar20>, 2020.
- 7) Ali, A., Jones, J., “*Between Design Process and Process Design: lessons learned from process engineering*”, The International Journal of Environmental, Cultural, Economic and Social Sustainability, British Columbia, Canada, Conference proceeding, 2012.
- 8) Bozorgi, A. and J. Jones, “*Integrating Value and Uncertainty in the Sustainable Options Analysis in Real Estate Investment*” the Architecture Research Centers Consortium, 2011 Conference. Detroit MI, April 20 – 24.
- 9) Bozorgi, A., and J. Jones, “*Integrating Value and Uncertainty in the Sustainable Options Analysis in Real Estate Investment*” in the Journal of Sustainable Real Estate. 2014.
- 10) J. Jones, “*Daylighting in High Performance Schools*”, the AIA – CSI annual conference and trade show. Virginia Beach. April 5, 2005.
- 11) J. Jones. “Application of Solar Electric and Thermal Solar Integrated Building Systems to Learning Environments and Laboratories” presented and published in the conference proceedings for the First Conference and Exhibition on Renewable Energies and Water Desalination Technologies”. Al Fetah University, Tripoli Libya, March 11 – 13, 2008.
- 12) Jones, J. and H. Singh. “HVAC Design and Operations in Response to Homeland Security Issues – A Decision-making Process”. ASHRAE Winter Meeting Proceedings – NY-08-048. The American Society of Heating, Refrigerating and Air-conditioning Engineers. Atlanta GA. 2008.
- 13) J. Jones, C. Ounkomol, P. Vlachos and Y. Zhoa. “Comparison of Measured and Simulated Airflow rates at Selected Locations in a Naturally Ventilated Building”. The

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IAQ2007 conference, Tokyo Japan. Sponsored by the American Society of Heating, Refrigerating, and Air-conditioning Engineers.

- 14) Jones, J., A. Tai and S. Elmasry. “Contemporary Learning Environments: Innovative Design Solutions” Presented at the Virginia Educational Facility Planners conference, Roanoke VE. Fe. 26-27. 2007.
- 15) Jones, J. , A. Tai and S. Elmasry. “Innovative Learning Environments” Presented at the Innovate 2007 conference sponsored by the Virginia Department of Education and the Institute for Connecting Science research to the Classroom, May 8, 2007, Richmond, VA. (At the request of the conference chairman – Joy Clobert)
- 16) Zhao, Y. and J. Jones. “A decision-support Framework for the Feasibility of Natural Ventilation of Non-residential Buildings”. SOLAR 2006. The American Solar Energy Society.
- 17) Y. Zhao and J. Jones, “Decision-support for Natural Ventilation of Non-Residential Buildings”, ACSA Technology Conference. 2007.
- 18) E. Grant and J. Jones. “*A Framework for Decision-making in Vegetated Roofing System Design*”, Third Annual International Greening Rooftops for Sustainable Communities Conference. Washington, DC. May 4-6, 2005.
- 19) Jones, J. and S. Olbina, “*Annual Energy Consumption Assessment of Ventilated Double Glass Facades Using Computer Simulation*” ASTM conference proceedings: Glass in Buildings. Pittsburgh, PA. April, . pp. 89- 95. 2002.
- 20) Jones, J. and A. West, “*Natural Ventilation: The Need for Collaborative Design*”, The ASHRAE Journal. American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc. Atlanta, GA. November, pp. 46 – 51. 2001
- 21) Abaza, H., J. Jones and Y. Beliveau, “*Dehumidification Through Nighttime Ventilation*” Conference proceedings - FORUM 2001 – The American Society of Mechanical Engineers. Washington DC. April, pp. 35 – 41. 2001
- 22) Jones, J. and S. Shou-Li, “*Experimental Study of Cooling Season Performance of Ventilated Double-Glass Envelope Cavities*” Conference Proceedings – International Conference on Building Physics. Eindhoven, The Netherlands, October. pp. 357 – 365. 2000
- 23) Jones, J. “*Comprehensive Evaluation of Integrated Architectural Systems*” ACSA Technology Conference. Cambridge, Mass. pp. 154 – 161. 2000.

***Patents held:***

An Omni-directional Low Pressure Roof vent for Low-slope membrane roofing systems.

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***Selected Research Activities:***

J. Jones and R. Gibbons, Lighting and Health: Development of a new course focused on the intersection of lighting and health, sponsored by the Nuckolls Foundation, \$30,000. 2021-22

J. Jones, In cooperation with Dr. Bandar Alkahlan and the King Abdul Aziz City for Science and Technology this partnership seeks to address the growing demand for mass customized housing in Saudi Arabia. Funded at \$194,000. Project final report submitted in December 2018. An extension to the project has been submitted that proposes additional work at \$294,000 for 2020-21

J.Jones, By invitation, established a working relationship with the Eco Village development group in Charlottesville VA. The Center for High Performance Environments supported graduate students in architecture that provided design recommendations and development for a 40 unit environmentally friendly residential community. The Eco Village consortium funded the project at \$10,000 in 2019.

J.Jones, Partnership with Michelle Brauns, Executive Director for the Community Health Center for the New River Valley. Resulted in the design development of a new Community Health Center clinic to be located in Christiansburg, VA. 2019-20

J.Jones, ISCE proposal for the design development of a new modular classroom for workforce training. In cooperation with Wytheville Community College and the Beloved Community initiative. Funded by the Institute for Society, Community and Environment at \$10,000. 2018

J. Jones, Design development for a Prototypical modular STEM classroom in cooperation with NRB Inc. (modular manufacturer), Acrylife Inc. (advanced roofing) and Wythe County Public Schools (Superintendent Dr. Perry). Submitted as The Cornerstone Project to the Institute for Society, Culture and Environment. Funded at \$10,000 in 2017.

J.Jones, ICAT proposal for **Natural Rhythms and Temporal Perception – visualization of sunlight patterns in the Sandbox**. Funded by the Institute for Creativity in Art and Technology at \$7,500. 2016-17.

J. Jones, “A new decision-support model for including risk and uncertainty in green systems investment analysis.” Funded by The Appraisers Research Foundation at \$5000. 2014.

J. Jones, “Development of a New Independent Living Community”. Funded by Friendship Retirement Community at \$5000. 2014.

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- J. Jones, “Guidelines for the Design of Sustainable Learning Laboratories that Teach Through Architecture”. 2008 AIA Upjohn Research Initiative Award. Funded at \$25,000. December, 2008.
- J. Jones “Investigation of the performance and cost benefits of new and emerging lighting technologies.” Innovative Solutions Grant – Virginia Tech. Funded at \$18,000. 2007.
- J. Jones, “The Cost/Benefit Assessment of Vegetated Roof Systems in Southwest Virginia.” The Virginia Department of Mines, Minerals and Energy. Funded at \$32,794. 2006.
- J. Jones, “Design and Construction of a Regional Environmental Learning Center.” The US Department of Energy. Funded at \$241,000. 2006.
- J. Jones, “Design and Development of an Integrated Photoelectric Membrane Roof.” The Virginia Department of Mines, Minerals and Energy. Funded at \$46,074. 2005.

***Student Advising Activities:***

- Chair - 31 Undergraduate Architecture theses (severd on over 30 committees)
- Chair - 35 Masters of Architecture theses (served on over 50 committees)
- Chair - 25 Masters of Science theses
- Chair - 30 Ph.D. dissertations
- Under my supervision students have won 25 national or college-level awards