

Ann-Perry Witmer, PE
(217) 244-7805 • awitmer@illinois.edu

EDUCATION

Doctor of Philosophy in Agricultural and Biological Engineering Jan. 2017-Dec. 2018

University of Illinois at Urbana-Champaign

- Research focused on engineering sustainability and effectiveness through context
- Led research team composed of graduate and undergraduate students
- *Advisor:* Professor Rabin Bhattarai

Master of Science in Civil and Environmental Engineering Jan. 2015-Dec. 2016

University of Illinois at Urbana-Champaign

- GPA 3.85
- Sustainable and Resilient Infrastructure Systems
- Interdisciplinary Specialty in International Service Design
- *Advisor:* Professor Jeremy Guest

Bachelor of Science in Civil Engineering Aug. 1998-May 2002

University of Illinois at Urbana-Champaign

- Highest Honors – GPA 3.96
- Minor concentration in risk and reliability
- Undergraduate research project on bacterial inactivation in drinking water using ultraviolet light
- *Research Advisor:* Professor Benito Marinas
- *Academic Advisor:* Professor Vernon Snoeyink

Bachelor of Science in Journalism Sept. 1978-May 1982

Boston University

- Magna Cum Laude – GPA 3.5

Bachelor of Arts in Art History Sept. 1980-May 1982

Boston University

- Magna Cum Laude – GPA 3.5
- Minor concentration in English literature

TEACHING AND MENTORING EXPERIENCE

Instructor May 2014-present

College of Engineering, University of Illinois (IEFX)

College of ACES, University of Illinois (Agricultural and Biological Engineering)

Carle-Illinois College of Medicine, University of Illinois (Research mentor)

- Teach courses in international engineering design, engineering leadership and communications, professional development, engineering sustainability, and social innovation, as well as proposed cultural competency course for CICOM beginning Spring 2019
- Collins Scholar, April 2015

Adjunct Lecturer August 2013-present
College of Engineering, University of Illinois

- Provide expertise on international service design for programs across campus
- Teach year-long, multi-disciplinary engineering design course in international service project development and implementation

Faculty Advisor
Engineers Without Borders, UIUC Chapter

Affiliations
Illinois Water Scholar, Institute for Sustainability, Energy and Environment
Affiliated Faculty and Advisory Committee member, Center for African Studies
Affiliated Faculty, Center for Latin American and Caribbean Studies
Affiliated Faculty, Center for Global Studies

Faculty Support/Advisor December 2014-January 2015
John Hedeman India Immersion Trip to Chennai and Delhi, India (14 days)
College of Business BA 532 course, University of Illinois Urbana-Champaign

RESEARCH INTERESTS

Effectiveness and sustainability of international engineering projects in rural contexts

- Developed concept of Contextual Engineering, a multi-disciplinary engineering approach that merges social sciences with technical design to meet needs and expectations of client society
- Collaborating with departments and faculty around campus to develop stronger understanding of conditions and characteristics that lead to long-term success and sustainability of engineering projects serving rural societies throughout the world.
- Established predictive tool for use in engineering assessment to better understand societal conditions that affect adoption of engineered infrastructure technologies in alternately developed societies.

PROFESSIONAL

Consulting Engineer May 2002-present

- Licensed professional engineer for major Midwestern consulting firms, providing engineering design to municipal drinking water systems in Wisconsin, Illinois, Minnesota and Iowa
- LEED Accredited Professional in Building Design and Construction
- Certified in vulnerability Assessment facilitation and performance, Sandia Laboratories, 2004, and Fall Protection/Confined Entry basic training, 2002

Free-Lance Writer February 1991-April 2002

- Professional communicator serving diverse clients including Fortune 500 companies, video production facilities, newspapers and magazines
- Syndicated feature writer for newspapers across U.S.
- Award-winning columnist addressing environmental issues in central Illinois for metropolitan daily newspaper

News Editor/Reporter

- Assignment editor and news reporter for daily newspapers in Illinois and Pennsylvania
- Award winning columnist for general interest columns
- Beat assignments included federal courthouse, city government and police, higher education and science/technical

INSTITUTIONAL AND PROFESSIONAL SERVICE

University YMCA Board of Governors, 2016-present (board vice-chair, 2018)

University YMCA Global Engagement Committee, chair, 2015-present

International Rural Water Association, board of directors, 2017-2018 (board secretary, 2017)

Akelos, ex-officio board member, 2017-present

American Water Works Association (AWWA) AWWAIndia Advisory Committee, 2015-present

Wisconsin Water Association Section Past Chair, 2015; Chair, 2014, Vice Chair, 2013; Senior Trustee, 2012; Trustee at Large, 2008-2010

Presidents United to Stop Hunger (PUSH) workshop participant, March 2018

Defining and Evaluating Effectiveness of Development Programs, University of Illinois Urbana-Champaign workshop participant, December 2014

Sustainability Ambassador, Certified Green Office Program, ISEE, University of Illinois Urbana-Champaign, 2014-present

Community Engineering Corps (EWB/AWWA/ASCE) Domestic Application Review Committee member, 2014-present

Engineers Without Borders-USA, International Community Program Guru, July 2016-present

AWWA Section Communications Committee chair, 2012-2018

AWWA Public Affairs Council member, 2012-2018

World Water Alliance of Florida, vice president, 2012-present

Engineers Without Borders professional affiliate, 2010-present

Society of Water Professionals, Wisconsin Rural Water Association, 2007-2013

Wisconsin Water for the World Committee, founding chair, 2004-2006

Water For People, section committee chair, 2002-2004

HONORS AND AWARDS

Illinois International Graduate Achievement Award, 2017

J. Frederick Miller Award for distinguished volunteer service, University YMCA, 2017

Honoree, *150 for 150: Celebrating 150 Years of Women at the University of Illinois*, 2017

Engineering Council Award for Excellence in Advising, University of Illinois College of Engineering, 2017

List of Teachers Ranked as Excellent, UIUC, Sp 2018, Fa 2017, Sp 2017, Fa 2016, Sp 2016, Fa 2015, Sp 2015, Fa 2014

University of Illinois representative, Magrath-Kellogg Awards for Community –University Engagement

Faculty Development Grant recipient, UIUC Office of Undergraduate Research, Sp 2015

Faculty Retreat Grant recipient, Sp 2015

Provost's Initiative on Teaching Advancement Grant recipient, Su 2015

Peer Review, Wisconsin Builder, 2009 – Service work featured in trade magazine

Leon Smith Award, Wisconsin Water Association, 2008

Harvey Jordan Award, University of Illinois College of Engineering, 2002

William McKay Award, University of Illinois Dept. of Civil and Environmental Engineering, 2002
Phi Kappa Phi engineering honor society, 2002
Public Service Award, Isaac Walton League of America, Illinois Division, 1990
Keystone Press Award, Pennsylvania Newspaper Publishers Association, 1984
Pi Sigma Alpha (Mortar Board) honor society, 1982

PUBLICATIONS/PRESENTATIONS (Selected)

“The Influence of Development Objectives and Local Context upon International Service Engineering Infrastructure Design,” (2018) *International Journal of Technology Management & Sustainable Development* 17(2)

“Contextual Engineering Assessment Using an Influence-Identification Tool”, (2018) *Journal of Engineering, Design and Technology* 16(6)

“Contextual Engineering to Address Preservation of Rural Societies”, (2018) presented at *Oxford Symposium on Population, Migration and Environment*, Aug. 4, 2018, Oxford UK

“An Ethnographic Justification for Establishment of a Contextual Engineering Discipline”, presented at 7th *Annual Sociology of Development Conference*, October 21, 2018, Champaign, IL

“Making the case for food security through contextual engineering”, presented at *Agripace '18 International Conference on Agricultural and Food Sciences*, Nov. 27, 2018, Bangkok, Thailand

“Women in Engineers Without Borders,” in *Women and Ideas in Engineering: Twelve Stories from Illinois*, ed. Hahn, L. and A. Wolters, University of Illinois Press, 2018.

“Bringing Social Context to International Engineering Design” – C-U Hydraulic Engineering Luncheon, October 2017

“Considering Context in Engineering Design” – Engineers Without Borders-USA National Conference, October 2017

“The Intersection of Education and Service in Sub-Saharan Africa” – UIUC Center for African Studies Brown Bag Series, September 2017

“Drawing Upon Non-Engineering Disciplines to Research Sustainability of Engineered Infrastructure in South America” – American Society for Engineering Education Annual Conference & Exposition, 2016

“Bringing a Cross-Disciplinary, Contextual Approach to International Service Engineering Learning” – American Society for Engineering Education Annual Conference & Exposition, 2016

“You Are a Work In Progress” – Freshman engineering LAUNCH presentations, 2015 and 2016

TED Talk, “Relinquishment of Control” – TEDxUIUC Conference, 2015

“Change is Challenging” – Leaders for Global Change Conference Keynote, 2015

“Mentoring Student Groups Effectively on International Projects” – ISAWWA Webinar, 2015

“Navigating the Challenges of Engineering for International Service” – ABE i4 Seminar, University of Illinois at Urbana-Champaign Sp 2015

“Forging a Utility/Customer Partnership to Address Water Quality Violations” – AWWA Annual Conference and Exposition, 2014

“Experiences from the Field” – Defining and Evaluating Effectiveness of Development Programs Workshop, University of Illinois Urbana-Champaign, 2014

“Applying Service Project Design to Illinois Systems” – Illinois Section AWWA Webinar, 2010

“Geothermal Technology: A Green Hornet’s Nest for Drinking Water Suppliers” – Wisconsin Water Association Magazine, Su 2010

“If Not Now, When?”—CEE Magazine, Su 2009

“Water System Sustainability Planning: Holistic Water System Management for Now and the Future” – Illinois Section AWWA Webinar, 2009

“Retrofitting Water Facilities for New Functionality” – Wisconsin Water Association Annual Meeting, 2009

“WWA Pumps Water and Hope into a Rural Mayan Village” – Wisconsin Water Association Magazine, Summer 2007

“Engineering the Possibilities” – CEE Magazine, University of Illinois Urbana-Champaign, Fall 2002