

Investigations at the intersection of form and performance: research, design, make, teach, publish, repeat.

EDUCATION

Master of Architecture, UNC Charlotte. 3.9 GPA, Tau Sigma Delta, Alpha Rho Chi Medal, Boardman Fellowship, USGBC Rob Eggers Scholarship, UNCC SOA Alumni Scholarship, SOA Excellence in Technology Award.

B.A., Plan II (honors liberal arts), UT, Austin. 3.9+GPA, summa cum laude, Phi Beta Kappa.

 \Diamond

WORK EXPERIENCE

Project Faculty, The SUREHOUSE, Stevens Institute of Technology. 2014 - 2015. Member of faculty team for SIT's entry in the 2015 Solar Decathlon. Worked with students to design, build, and operate a high performance, technologically advanced, solar-powered, flood-proof house. The project won 1st place in 7 contests and 1st place overall.

Project Manager, UrbanEden Project, UNC Charlotte. 2011 - 2014. Oversight of student design and construction team on the 2013 Solar Decathlon entry that won the People's Choice Award and 3rd in Engineering. Ran team that developed high performance precast wall system with integrated thermal transfer; first geopolymer cement concrete building in the world.

Research and Teaching Assistant, UNC Charlotte. 2011 - 2014. Research assistant on DOE grant to develop new residential weatherization system for low income housing. Teaching assistant for Materials and Design Methodologies.

Managing Director, The Nauhaus Institute. 2009 - 2011. Created and ran non-profit tasked with development of residential carbon neutral design/build systems. Designed and built what might be the most energy efficient (Passivhaus standard) "natural" (site produced materials, hempcrete wall system) building in the world.

Adjunct Professor, UNC Asheville. 2009. Taught "Green Building" in Environmental Studies department.

Principal, Think Green Building. 2005 - 2009. Ran small consulting and design firm that specialized in "hyper green" residential projects. Services included site analysis, Passivhaus modeling, and turn-key design.

Author, Presenter. 2002 - present. Freelance writer and presenter on high performance, low-embodied energy design and building techniques for residential construction.

Building trades. 1993 - 2005. Wide variety of experience in the construction trades including concrete, masonry, wood, and steel applications. Specialization in alternative construction materials, methods, and systems.

PUBLICATIONS

Building Green: A Complete How-to Guide to Alternative Building Methods: Earth Plaster, Straw Bale, Cordwood, Cob, Living Roofs. NYC: Lark Books, 2005.

The Good House Book: A Common-Sense Guide to Alternative Homebuilding. NYC: Lark Books, 2004.

Periodicals. Numerous articles in a variety of publications including Mother Earth News, The Timber Framer's Journal, Library Journal, PCI Journal, and Natural Home.

DESIGN TOOLS

Software: Revit, Vasari, Ecotect, Radiance, Therm, Rhino, Grasshopper, Adobe Suite, PHPP, Excel

Certifications: Passivhaus Consultant, BPI Building Analyst, OSHA Construction Safety



