University of Houston | Gerald D. Hines | **College of Architecture**

Andrew Vrana, NCARB, RA
Visiting Assistant Professor

Contact Information:
phone: 713 743 1148
email: avrana@uh.edu

Mailing Address:
122 College of Architecture Building
Houston, TX 77204-4000

Education
Master of Architecture, Columbia University Graduate School of Architecture, Planning and Preservation
Bachelor of Environmental Design, Texas A&M University
Registered Architect, Texas

Research Interests
Parametric Design and Digital Fabrication
Interactive Installations
Sustainable building components and assemblies
Architecture, Civic Art and Product

Professional Practice and Collateral Organization
METALAB, Principal Architect
TEX-FAB *Digital Fabrication Alliance, Co-Director

Current Projects
Memory Cloud
Memory Cloud is the winning commission awarded by Texas A&M University for the new Memorial Student Center 12th Man Hall. The work incorporates programmable LEDs, remote sensing, parametric design and digital fabrication to create an open ended narrative of the story of the University through animated silhouette imagery of past and real-time present student life on the campus.

PV-POD
The PV POD is a High-Density Polyethylene (HDPE) vessel that is filled with water as a ballast and used to mount single Photo Voltaic modules to flat roof tops. With over 30 billion square feet of existing commercial flat roof space in the United States, our team, along with industry partners, identified existing flat roof buildings as the market with the most potential for rethinking how solar panels are mounted to buildings. Winner of ARCHITECT Magazine's R&D Award

Smilebooth
The Discus concept for the Greater East End's Solar Pedestrian Pathway Lighting design provides a robust stand-alone solar-powered system. The cluster concept pairs a string of highly efficient LED light fixtures with a solar generator that also provides form and function as a shelter and seating area. Each generator consists of both solar panels and batteries held below a simple bench surface. the generator harvests power during the day to be stored and released to the string of pathway lights at night. The solar generators are designed to provoke curiosity, provide shade, and be effective in different locations within the Greater East End District.

APPLIED Research Through Fabrication
APPLIED is a two-stage international design competition organized by TEX-FAB established to foster the deeper developments within the field of *computational fabrication*. Projects exhibited and judged at the 2012 ACADIA conference and winning project to be constructed at TEX-FAB 4.0 event in Dallas in 2013.

Courses Taught
ARCH 5500 *Architecture Studio IX*
ARCH 3398 *Green Building Components Seminar co-taught with Joe Meppelink (Fall 2012)*
ARCH 3398 *Digital Fabrication Seminar co-taught with Joe Meppelink (Spring 2013)*