Christopher Mackey

(516) 509-0165
chris@mackeyarchitecture.com

Education

Massachusetts Institute of Technology, Cambridge, MA
> Expected Degrees: Masters of Architecture + Masters of Science in Building Technology ('15)
> Current GPA: 4.8 (out of 5.0)

Yale University: New Haven, CT
> Degree: Bachelor of Arts in Architecture with Distinction ('10)
> Major GPA: 3.69 (out of 4.0)   Overall GPA: 3.58 (out of 4.0)

Experience

Software Developer, Ladybug + Honeybee Environmental Plugins: Summer '13 - Present
- Coded and developed over 30% of the project's grasshopper components including nearly all of the project's tools for thermal comfort analysis, energy simulation visualization, and shade design.
- Provided support, tutorial videos, and bug fixes to the global community of over 500 active beta-testers and over 12,000 total downloaders.
- Conducted several workshops to teach the tools to hundreds of students and professionals.
- Applied the tools to academic design work and professional practice.

Advanced Computer Modeling + Sustainability Intern, Thornton Tomasetti: Summer '13, Summer '14
- Developed several computer applications for individual projects including scripts to optimize shading/fritting systems, tools to ensure adequate sunlight for plants (PAR), and a complete working EnergyPlus model of a double-skin façade system, used to determine the best means of operating shading and ventilation.
- Applied the tools to several projects including a constructed office, two constructed stadiums, two residential skyscraper competitions, and a museum competition.

Full Time Architectural Intern + Web Master, Dean Sakamoto Architects: Summer '10 – Summer '11
- Participated in the design, digital 3D modeling, and client/public presentation of a variety of architectural projects including a public greenway, an airport master plan, and two exhibitions.
- Designed and coded the firm's current website as the firm's sole web developer.

Climate Researcher, Yale University Center for Earth Observation: Spring '10 – Summer '11
- Published a paper as the first author in the peer-reviewed scientific journal *Building and Environment*.
- Conducted a novel investigation into Chicago's efforts to cool its climate in the face of urban heat island and global climate change.
- Obtained an understanding of the untapped potentials in multi-spectral raster satellite data.

Climate Researcher, National Disaster Preparedness Training Center: Summer '11, Summer '12
- Researched hurricane resilient architecture strategies and assembled a 2-week course on the subject.
- Helped get the course approved by FEMA and the AIA to be taught to professional architects for credit.
- Taught the course several times to architectural professionals and graduate students.
- Surveyed and mapped damage in the aftermath of Hurricane Sandy in order to update the course.

Journalist + English Editor, Danish Architecture Center, Copenhagen: Summer '09
- Published a weekly blog on the Danish government's Sustainable CitiesTM website.
- Edited the English in the Center's current exhibit to ensure international accessibility for COP-15.

Skills

Computer Languages: Python, HTML5, CSS, Javascript
Computer Applications: Rhinoceros (incl. Grasshopper, GHPython, RhinoCommon); Revit (incl. Dynamo); EnergyPlus; Radiance; OpenStudio; Unity; ArcGIS; ENVI; MasterCAM; Adobe CS/CC
Spoken Languages: Nearly-Proficient Spanish (studied for 8 years)