THOMAS SHOULER
RESUME

http://thomasshouler.com
thomas.shouler@gmail.com
+1 631 252 4419

45 Prichard Avenue
Somerville MA 02144
United States

WORK

RICHARD / ARUP
MAY 2015 - PRESENT

Designer and developer for full stack of web application to automate material optimization of structural systems, and address issues of scale designers encounter when working with larger buildings projects.

+ Solicited global leadership to secure funding for development of project
+ Deployed application amongst staff, to replace more typical spreadsheet-based workflows for design of new 470,000m^2 international airport in Mexico City

GRASSHOPPER LIBRARY / ARUP
SEP 2014 - PRESENT

Designer and developer of code block library for existing visual algorithmic modeling platform, Grasshopper, which is widely adopted by industry.

+ Building wrappers around APIs of industry software into visual I/O blocks, which staff rapidly assemble into complete algorithms
+ Conducting formal and informal training to grow development competencies within the office

GUGGENHEIM MUSEUM / ARUP
ABU DHABI, UAE
AUG 2013 - AUG 2014

Worked collaboratively with staff to incorporate database-centric workflows into design process of 90,000m^2 museum located on reclaimed land at the tip of Saadiyat Island. Existing spreadsheet methods of working were replaced with more robust, scalable processes.

RAFFLES CITY DEVELOPMENT / ARUP
CHONGQING, CHN
JUN 2012 - JUL 2013

Automated conceptual analysis and design of glazed vault, enclosing 9,000m^2 contiguous roof structure atop 4 high rise towers in central China. Working closely with the architect, a host of different structural systems were explored parametrically to determine the most appropriate solution for the given context.

ARMADILLO CRÈCHE / CUSD
COSMO CITY, RSA
JAN 2011 - MAY 2012

Coordinated structural engineering of 600m^2 early childhood development center in integrated housing development north of Johannesburg. Personally responsible for the execution of the structural design and build scope.

EDUCATION

CORNELL UNIVERSITY
AUG 2011 - MAY 2012
MEng, Structural Mechanics and Materials
GPA = 3.92

CORNELL UNIVERSITY
AUG 2007 - MAY 2011
BS, Civil and Environmental Engineering
GPA = 3.42

TECHNOLOGY

ACTIVELY USING:

Bash	Oasys GSA
Flask	Python
Grasshopper	MySQL
HTML/CSS	Rhinoceros
Javascript	SQLAlchemy
JQuery	

FAMILIAR WITH:

D3.js	Polymer
MongoDB	Three.js
Adobe Illustrator	
Adobe Photoshop	
Adobe Indesign	

AWARDS

ARUP REAL BIM AWARDS   2014
TECHNOLOGY CATEGORY WINNER

ENR AWARDS   2013
GLOBAL BEST SMALL PROJECT

ARCHITIZER A+ AWARDS   2013
STUDENT DESIGN/BUILD WINNER

ROLBAND FELLOWSHIP   2012
CORNELL UNIVERSITY

KENT FELLOWSHIP   2012
CORNELL UNIVERSITY

ETC

PROFESSIONAL ENGINEER   2014
STATE OF CALIFORNIA

VARSITY CROSS COUNTRY AND TRACK+FIELD   2008 -2011
CORNELL UNIVERSITY