



I design, prototype, and manage the development of tangible-interactive platforms, blending hardware, software, and analytics.

Interests

Mathematical Modeling
Data Visualization
Tangible-Interaction
Augmented Reality
Rapid Prototyping
Computer Vision
Statistics
Graphics and Layout
Public Speaking

Software Skills

Java/Processing
Javascript/d3/HTML/CSS
OpenCV (Computer Vision)
ArcGIS/Google MapsAPI
CAD (Rhino, Autodesk)
Scripting/Grasshopper
SketchUp Pro
Adobe Suite

Hands-on Skills

Carpentry
Laser Cutting/CNC
3D Printing
Scale Modeling
Sketching

Hobbies

Intermediate Japanese
Folk Dancing
Organic Farming
Commuter Cycling

Home(s)

Asheville, North Carolina
Boston, Massachusetts
Tokyo, Japan

Education

- Massachusetts Institute of Technology**, Cambridge, MA
Sep 2013 Master of City Planning - City Design and Development
June 2010 Bachelor of Science and Design
tEp
- University of Hong Kong**, Hong Kong, HK
Fall 2009 Exchange Student, Awarded Friends of HKU Scholarship
- NC School of Science and Mathematics**, Durham, NC
June 2006 Most Outstanding Senior Mathematics Student, GPA: 4.0/4.0

Research and Initiatives

- Sep 2013-Present **CityScope**, *Lead Research Scientist*, MIT Media Lab
Leading conception and development of Cityscope, a tangible-interactive environment that merges augmented reality with advanced simulation and modeling.
<http://cp.media.mit.edu/city-simulation>
- Aug 2012–2013 **MIT Commuter Common**, *Researcher*, MIT Media Lab
Developed new ways of understanding and analysing the demography of commuters at MIT, and collecting data thereof.
- Jun 2010–2012 **China Energy Foundation**, *Researcher*, Beijing, China
Conceptualized user interface for the “Energy Proforma” web tool, which allows architects and developers to understand relationship between urban form and energy consumption
<http://energyproforma.mit.edu/>
- July 2008–present **MIT-Japan Tane Initiative**, *Cofounder*, Shiga, Japan
Conducting annual workshop to foster connectivity among MIT community in Japan, working to solve the systemic erosion of rural communities in the country
<http://web.mit.edu/tane/>

Recognitions

- Oct 2014 **TEDx Boston**, Presenter
Presented work of MIT CityScope for TEDx Boston, which was live-streamed and published online.
- July 2012 **MIT Energy Fellowship**, Shell-Mobility Fellow
- June 2010 **Phi Beta Kappa Honor Society**
- June 2010 **Undergraduate Faculty Award for Achievement in Design**
- Jan 2009 **FIRST Place, MIT Amherst Alley Competition**
Studied and redesigned alleyway and landscape on MIT campus
- Jan 2008 **FIRST Place, Velux Design Competition**
Codesigned a four-bedroom guest house at MIT, innovating natural daylight and ventilation

Work Experience

- Sep 2013-Present **MIT Media Lab**, Research Scientist, Cambridge MA
Working with the Changing Places Group at the MIT Media Lab to actively develop a suite of City-themed projects. Roles include product development and inter-institutional collaboration.
- Jun-Sep 2008 **Kobayashi Maki Design Workshop**, *Designer*, Tokyo Japan
Aug 2010–2011 Consulted with Walmart-Japan to re-brand newly acquired chain of 400 general merchandise stores, originally known as Seiyu. Re-tailored corporate manifesto for Japanese markets, specified interior layouts for merchandise, and designed new aesthetic
- Jan 2009 **Utile Design Inc.**, *Intern*, Boston MA
Jan–May 2010 Worked with City of Boston to design innovative visual representations for Boston’s Complete Streets Guidelines, appropriate for broad audiences, viewable through both print and digital media
<http://www.bostoncompletestreets.org>
- Jan–May 2009 **MIT Endicott House Compost Facility**, *Consultant*, Dedham MA
Researched and designed specifications for new compost facility, capable of handling 50 annual tons of MIT’s campus yard refuse
- Jan 2008 **Bobbitt Design-Build**, *Intern*, Raleigh NC
Produced Sketchup model of lead architect’s proposed design for an addition to the Bobbitt design office, then devised and gave presentation with 3D walkthrough to company president
- Jun–Sep 2007 **Rockefeller Partners Architects**, *Intern*, El Segundo CA
Developed and assembled construction details and documents, systematizing an office detail library; Field-measured the Hollywood Roosevelt Hotel