



I design, prototype, and manage the development of tangible-interactive platforms that blend 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, PBK Honors

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

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/>

Speaking and Media

July 2016 **World Cities Summit**, Invited Exhibiter, Singapore

May 2016 **Chuo University**, Guest Speaker, Tokyo, Japan

April 2016 **G7 Summit ICT Forum**, Panelist, Takamatsu, Japan

April 2016 **American Planning Association**, Guest Speaker, Pheonix AZ

Oct 2015 **Guiyang Big Data Conference**, Keynote Speaker, China

Nov 2014 **Autodesk University**, Guest Speaker, Las Vegas, NV

Oct 2014 **TEDx Boston**, Presenter, Boston MA

May 2014 **CBS Boston**, Television Interview, Boston MA

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