

Alexander Watanabe

Education

- 2013 **University of Michigan** - Ann Arbor, MI
Master of Science: Material Systems; full tuition scholarship and stipend.
- 2012 **University of Michigan** - Ann Arbor, MI
Master of Architecture; 2011, 2012 studio project selected for student show.
- 2009 **Waseda University** - Tokyo, Japan
Bachelor of Arts: Liberal Arts

Experience

- Software Designer**
10/2012 - present
rootoftwo: menotme, Whithervane - Detroit, MI
Whithervane: Coding in Python, parsing RSS newsfeeds to extract location and contextual information to use as dataset for microcontroller based performance art installation at invitational UK art festival.
menotme: Developed and executed a code solution that responded to the required behavior of the custom hardware system and provided expertise to identify and translate system requirements into software design. Collaborated with the Project Manager to write, test, debug and maintain the software solution. Installed for DLECTRICITY 2012.
- Workshop Instructor**
1/2013 - 5/2013
Cathlyn Newell: GLOW - Ann Arbor, MI
Developed and taught two workshops teaching graduate students hardware and programming skills necessary to design and build interactive lighting installations for the Flint Free City Public Art Festival.
- Research Assistant**
9/2012 - 5/2013
Geoffrey Thün: Integrated Responsive Building Envelopes - Ann Arbor, MI
Programmed building energy model in C++ and Python towards analysis and validation of performance gains of distributed networked sensing, actuation platform.
- Technical Consultant**
5/2012
SIFT studio: Veer - Stuttgart, Germany
Designed, built and programmed lighting system under a short deadline. Required learning MaxMSP to translate audio phenomena into serial data to drive and arduino RGB lighting system meeting specifications by the composer and architect team. Installed at The Akademie Schloss Solitude.
- Photographer**
2/2010
Professor Claire Zimmerman - Leicester, UK
Systematically photographed over 6,000 images to create interactive 3D model of James Stirling's Leicester Engineering building using Photosynth.

Distinctions

- 2012 **MTV** - Brooklyn, NY
mLab Innovation Day: presented *DataFab*, Internet of Things infrastructural installation.
- 2007 **amniotic design** - Paris, France
c.art.net: art publication, five page spread of medium format photographs

Skillset

Programming - Arduino/Processing IDE, Python, C++, Haskell, Lua
Hardware - microcontroller sensing+actuation prototyping
CAD - Rhino (Grasshopper, Firefly) CATIA/Digital Project
DTP - Adobe Creative Suite, Lightroom
Photography - medium format, 4x5, studio lighting, full-frame digital

References

John Marshall - Founder, rootoftwo, hello@rootoftwo.com
Catie Newell - Assistant Professor, University of Michigan, cnewell@umich.edu