Nina Lutz

nlutz@mit.edu | www.nlutz.me | media.mit.edu/people/nlutz

20 Ames St
Cambridge, 02142
Office E15-494

T 480.285.9998

Profile

Graduate student at the MIT Media Lab. Interested in bringing interactive affordances to the physical world, especially in context of social identity, spatial interfaces, and cosmetics. Please see CV or website for all publications and projects.

Education

Massachusetts Institute of Technology — June 2019 - June 2021 (expected)
Candidate for M.S in Media Arts and Sciences — MIT Media Lab - Object Based Media

Massachusetts Institute of Technology — September 2015 - June 2019
B.S in Computer Science and Engineering with Design

Experience

Research Assistant; MIT Media Lab - Object Based Media — 2018 - Present
Working to examine the intersection between creative and display technologies. Individual research currently focusing on scattering models for alternatives to interior lighting as well as interactive, identity affirming experiences around cosmetics and technology. Group research including repairing old demonstrations and preparing an exhibition piece for the MIT Museum centered around interactive coral. Mentoring undergraduate students.

Research Supervisor — 2019 - Present
Mentoring multiple undergraduates with their research and projects.

Co-Instructor; MIT Departmnet of Urban Planning — Spring 2019
Developing a one month and sub sequentially semester long course with Ira Winder. Course taught computational urban science. Giving lectures on GIS data processing and computation techniques and data structures in Java and using software such as ArcGIS.

Teaching Assistant — Fall 2016 - Spring 2019
Assisted with multiple classes. See CV for details.

Research Assistant, MIT Media Lab - City Science; Cambridge, MA — 2015 - 2018
Programming software for tangible intervention systems. Formulating math models for urban simulation. Developing algorithms to make complex systems more realistic and efficient for real time changes and interaction. Processing, analyzing, and visualizing large sets of spatial data for user intervention. Utilizing computer vision, embedded electronics, and projection mapping. Managing projects, work sessions with member companies, and off site deployments to a variety of academic and industrial institutes internationally.

Skills

Software	Java, Python, C++, C, JavaScript, Processing, Unity
Web	Javascript, CSS, HTML, SQL, Ruby on Rails, three.js, OpenGL
Visualization	Processing, p5.js, d3.js, Tableau
Electronics	Arduino, Eagle, PID, general electronics and controllers, circuit design
Design	CAD (Rhinoceros and Grasshopper), Photoshop, Illustrator, Lightroom, InDesign, Drafting
Fabrication	Laser cutter, 3D Printer, CNC, Woodworking, Hand tools, Waterjet
Misc.	QGIS, ArcGIS, Madmapper, Projection mapping, basic optics equipment