Nina Lutz

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Profile

Current M.S candidate at the MIT Media Lab seeking full time opportunities starting after June 2021. Experienced in working with diverse and multidisciplinary teams in research and industry environments. Interested in leveraging user centric and data driven solutions for a variety of problems, especially in the intersection of design and technology in teams.

Education

Massachusetts Institute of Technology *Expected June 2021*
Candidate for M.S in Media Arts and Sciences

Massachusetts Institute of Technology *June 2019*
B.S. in Computer Science and Engineering with Design

Experience

Graduate Research Assistant, MIT Media Lab *May 2018 - Present*
Developing, managing, and planning projects in teams and for independent research for publication and exhibition. Group research including preparing an exhibition piece for the MIT Museum, research in architectural lighting and interactive computer vision, writing software for an interactive phone-based generative art work.

Research Supervisor, MIT Media Lab *January 2018 - Present*
Mentoring 2-3 undergraduates each term conducting research and independent projects.

Research Assistant, MIT Media Lab *Nov 2015 - May 2018*
Managed projects and sessions with member companies, and off site deployments to a variety of academic and industrial institutes internationally and domestically. Programmed software for tangible intervention systems. Formulated math models for urban simulation. Developed 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. Utilized computer vision, embedded electronics, and projection mapping.

Co-Instructor; MIT Department of Urban Planning Spring *Jan 2019 - June 2019*
Developed one month intensive and full semester courses with Ira Winder. Course taught computational urban science. Giving lectures on GIS data processing and computation techniques, including implementing data structures and algorithms in Java and GIS tools.

Software Engineering Intern, Apple *Summer 2017*
Wrote software for localization studies and services across a range of Apple products. Utilized machine learning and various data analysis techniques to understand user trends.

Teaching Assistant, MIT *Sept 2016 - June 2019*
Taught and prepared material for multiple classes in Computer Science, Design, and Urban Planning for undergraduate and graduate students. Managed students in fabrication spaces.

Skills

Software: Java, Python, C++, C, JavaScript, Processing, Unity, openFrameworks

Web: Javascript, CSS, Bootstrap. HTML, three.js, OpenGL, p5.js, d3.js, DJango, Heroku

Electronics: Arduino, Eagle, PID, General electronics and controllers, Circuit design

Data and Simulation: MATLAB, Keras, TensorFlow, SciKit, Jupyter, R, Stata, CAFFE

Fabrication and Design: CAD (Rhinoceros and Grasshopper), Photoshop, Illustrator, Lightroom, InDesign, Drafting, Laser cutter, 3D Printer, CNC, Woodworking, Hand tools, Water jet

Misc: Tableau, QGIS, ArcGIS, MadMapper, Projection mapping, Optics, Drafting