Nina Lutz

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Profile

MIT student seeking opportunities starting Summer 2021. Passionate about achieving user and data driven solutions that lead to communication and collaboration across different demographics.

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*
Managing, planning and developing projects in teams and for independent research for publication and exhibition. Projects focusing on leveraging numerical simulation, optics, computer vision and interactive technology for experiences. Including managing and developing experiences for participatory generative artworks for thousands of users.

Research Supervisor, MIT Media Lab *Jan 2018 - Present*
Managing 2-3 undergraduates each term conducting research on lab projects. Mentoring students through planning and executing independent projects while they learn new skills.

Graduate Fellow, MIT Undergraduate Research Opportunities Program *Sep 2020 - Present*
Running workshops and consultation sessions for research supervisors across all departments at MIT in order to increase effective project scoping and planning, especially during COVID-19.

Research Assistant, MIT Media Lab City Science Group *Nov 2015 - May 2018*
Managed projects and ideation sessions with institute collaborators, including off site deployments internationally and domestically. Programmed software for tangible intervention systems. Formulated math models for urban simulation. Implemented algorithms to improve fine grain complexity and efficiency of simulation systems for real time interaction. Processed, analyze, and visualized large sets of spatial data for user intervention.

Co-Instructor; MIT Department of Urban Planning Spring *Jan 2019 - June 2019*
Taught and planned courses covering computational urban science at the graduate and undergraduate levels. Gave lectures on GIS data processing and computation techniques.

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, OpenGL

Web: Javascript, CSS, Bootstrap, HTML, three.js, WebGL, p5.js, d3.js, Django, Heroku

Design: CAD, Adobe Creative Suite, Drafting, Laser cutter, 3D Printer, CNC, Woodworking

Data Science: Jupyter, R, Stata, SQL, AWS, Postgres, Qualtrics, NumPy, pandas, Tableau

Simulation/Learning: Caffe, Keras, TensorFlow, scikit-learn, MATLAB, OpenCV, SciPy

Project Management: G Suite, Excel, Asana, Tableau, Trello, Jira, Slack and Slack-bots

Misc: GIS, Rapid prototyping, User studies, A/B testing, Experimentation design, Statistics