

SUMMARY

MIT student studying Computer Science and Design. Interested in bringing information and concepts into forms for people to engage with. Open to both internship and research positions in the fields of urban planning, HCI, UI/UX, or information design.

EDUCATION

Massachusetts Institute of Technology (MIT)
Bachelor's of Science in Computer Science and Engineering | Minor in Design 2019

EMPLOYMENT

MIT Media Lab

Research Assistant · Nov 2015 to Current · Cambridge, MA

Programming software for tangible intervention systems. Formulating math models for simulations like gender accessibility in cities or office workflow based off sensor data. Developing algorithms and data structures 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 members, other undergraduates, and demos.

TA · Sep 2017 to Current · Cambridge, MA

Designing industrial design projects for first year students, including making door knobs and bluetooth music boxes. Teaching students CAD, machining, and electronics. Advising students on class and extracurricular choices. Helping to co-facilitate a weekly seminar.

Apple

Software Engineering Intern · May 2017 to Aug 2017 · Cupertino, CA

Programmed in the Cloud Services Localization (CSL) team.

PJ's Radio Control

Software Developer · Oct 2012 to Dec 2015 · Scottsdale, AZ

Designed and developed website. Integrated e-commerce. Optimized SEO for Amazon and other third party retailers. Configured fitment database and applied JavaScript filters to website so users can shop parts by vehicle.

SKILLS

| | |
|--------------------|---|
| SOFTWARE | Python, Java, MATLAB, R, C++, C |
| DATA VISUALIZATION | Processing, p5.js, d3.js, Tableau |
| WEB | SQL, node.js, Ruby on Rails, Javascript, PHP |
| ELECTRONICS | Arduino, Eagle, General microcontrollers and prototyping, Circuit and electronics design, PCB |
| DESIGN | CAD (Rhino and Grasshopper), Photoshop, Illustrator, Lightroom, InDesign, LEAP SDK |
| FABRICATION | Laser cutter, 3D Printer, CNC, Woodworking, Hand tools, Water jet, Basic welding |
| MISC. | QGIS, ArcGIS, Projection Mapping, OpenCV, SciKit, LabView |

PROJECTS

GeoBits

Summer 2016 to Current

Open source urban planning tool. Allows users to go anywhere in the world and make urban models utilizing open source data from Census and Open Street Map API. Experimentation with math models regarding accessibility in cities.

Hilbert Curve Necklace

Fall 2016

3D printing an algorithm with a physical circuit inside of the structure to make an interactive necklace. Visualized algorithm and wrote scripts to convert to an STL in Java.

SpaceWork

Spring 2017 to Current

Making an entire desk a touchscreen experience. Utilized computer vision and project mapping techniques. Fabricated desk and pen. Designed user interface and experience. Ongoing experiments and improvements of system.

Complete project listings on online portfolio ninalutz.github.io