

SUMMARY

MIT student studying Computer Science and Design. Interested in bringing information and concepts into forms for people to engage with. Open to internships and research in fields of HCI, UI/UX, data experiences, interaction design, or other intersections of design and technology.

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 member companies, other undergraduates, and demos.

TA and Associate Advisor · Sep 2017 to Current · Cambridge, MA

Formulating 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

Developed software in context of various Apple products 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, C++, C
WEB	SQL, node.js, Ruby on Rails, Javascript
DATA VISUALIZATION	Processing, p5.js, d3.js, Tableau
ELECTRONICS	Arduino, Eagle, General microcontrollers and prototyping, Circuit and electronics design, PCB Design and Fabrication
DESIGN	CAD (Rhino and Grasshopper), Photoshop, Illustrator, Lightroom, InDesign
FABRICATION	Laser cutter, 3D Printer, CNC, Woodworking, Hand tools, Water jet, Basic welding
MISC.	QGIS, ArcGIS, Projection Mapping, OpenCV, SciKit, LabView

PROJECTS

All projects on online portfolio ninalutz.github.io

Algorithmic 3D Prints: Textile and Necklace

Fall 2016

Used Lindenmayer rule systems to generate various 3D models for textiles and a Hilbert curve necklace with an integrated circuit.

Smart Wardrobe

Fall 2017

Built a wooden wardrobe and integrating electronics and interaction in a mirror interface and motorized door with interior lights.

Electronic Tattoos

Jan 2017

Participated in a workshop to design and implement ideas based on electronic body art. Designed, helped to fabricate, and programmed a system with a web server, graphical user interface, and electronic tattoo for children in pediatric wards to report pain readings.