Ariane Schoenwiesner

Boston, MA   ariane@nyu.edu
Cell: 973-715-9351   linkedin.com/in/ariane-schoenwiesner
https://www.ariane-schoenwiesner.com/

New York University
Tandon School of Engineering
B.S. Computer Engineering
August 2021

Experience

Ocean Discovery League, Remote   Winter 2022 — Present
     Sensors and Systems Development Volunteer
- Programmed frontend (Javascript and HTML) and backend (Python, FastAPI) server for modular underwater sensor system
- Modeled and fabricated modifications to existing sensor system enclosure

Rapid Liquid Print Co., Boston, MA   Winter 2021 — Present
     Mechanical Systems Engineer
- Designed extruder system for silicone gel suspension additive manufacturing
- Built a CNC machine interface using Javascript and Vue
- Developed a postprocessor in Python and C# to translate toolpath geometry into gcode
- Machined metal and plastic components on lathe and manual mill for 3d printer extruder assembly
- Configured electrical control systems for a CNC machine

IBM Research, Yorktown Heights, NY (remote)   Summer 2020
     Quantum Intern
- Developed puzzle game for teaching microwave pulse quantum state manipulation in Qiskit
- Measured results of experiments on IBM quantum systems using Jupyter Notebook

NYU Tandon MakerSpace, Brooklyn, NY   Summer 2018 — Summer 2021
     Equipment/Innovation Lead
- Evaluated potential equipment improvement benefits
- Developed standardized projects for advanced users on online instructional platforms
- Tested prospective equipment and fabrication techniques
- Facilitated design thinking and specialized fabrication workshops

     Training and Development Team Lead
- Developed guidelines for basic use trainings and machine troubleshooting
- Provided prototyping and fabrication guidance for students and faculty

Bloomberg L.P./NYU Center for Quantum Phenomena, New York, NY   Summer 2019
     Summer Quantum Computing Intern
- Configured experiments in Python using IBM Quantum Experience
- Manufactured laboratory experiment components using waterjet cutter
- Prototyped intern projects using additive manufacturing and laser cutting
- Observed nanoelectronics cleanroom fabrication protocol

Skills

Prototyping	Software	Languages
FDM/FFF, resin additive manufacturing	Fusion 360	Python
Laser cutting	Autodesk Eagle	Framework - FastAPI
WaterJet cutting	SolidWorks	C++
PCB fabrication	AutoDesk Maya	Javascript/HTML
CAM and CNC operation	Aspire CAM	Library - Vue
Manual milling	Adobe Photoshop & Illustrator	C#
Mold construction		Arduino

Projects

- **Qiskit Pulse Puzzle** - educational game for teaching microwave pulse quantum computer programming   Summer 2020
- **brian** - signal processing smart guitar, senior design project/NYU Prototyping Fund participant   Fall 2019
- **Climate Clock** - March for Science NYC climate change awareness clock exhibit, Fabrication Lead   Spring 2020 — Spring 2021
- **Shabani Lab** - Helmholtz mechanical bloch sphere simulator, Fabrication Engineer   Summer 2019