

Jill Schmid

Portfolio: www.jllschmd.com Email: JLLSCHMD@gmail.com

SUMMARY

I am an industrial designer and graduate from Rochester Institute of Technology. I have a background in both design and in manufacturing engineering, and my work focuses on combining modern design, technology and processes with elements of historical craftsmanship and methods. I specialize in woodworking and musical instruments, but work in a variety of different areas, including metals, soft goods, jewelry, and electronics.

EDUCATION

BFA Industrial Design | Summa Cum Laude Honors | 2022 - 2026

Industrial Design (Major)

Studio and lecture classes included design fundamentals (design research, ideation, sketching, prototyping, human factors, design validation), the use of design and CAD software (Adobe Suite, SOLIDWORKS, Sketchup, Fusion 360), woodworking (tablesaw, bandsaw, etc.) digital fabrication (3D printing, laser cutting, CNC routing) and other mixed-media refined prototyping skills (sewing, basic electronics, basic Python).

Manufacturing Systems (Minor)

Modules included understanding and applying manufacturing processes and materials, integrated design for manufacture and assembly (DFMA methodology and software), statistical analysis of manufacturing systems (6-Sigma, Quality Management, statistical process control), manufacturing of electronics (processes, machinery, micro-electronics), and the making and interpreting of engineering drawings.

EXPERIENCE

Manufacturing Engineering Intern at Paul Reed Smith Guitars | 2025 | Stevensville, Maryland, USA

- Collaborate with factory floor managers and operators to perform process audits and interviews then create and execute engineering tasks from these audits
- Use SOLIDWORKS to design and create jigs and fixtures using digital fabrication as well as traditional techniques and create and maintain documentation and engineering drawings of these fixtures
- Plan and implement a 3D printing process and maintain and modify 3D printers

Fabrication Technician at FabLab (RIT) | 2023-2026 | Rochester, New York, USA

- Operate and maintain laser cutters, vinyl plotters, waterjet cutters, CNC routers, and SLA and FDM 3D Printers

- Troubleshoot and prepare projects with customers for fabrication and resolve communication issues to ensure the best possible quality
- Use a ticket system to manage a large volume of fabrication requests

Summer Teaching Personnel at Nova Labs Makerschool | 2022-2024 | Fairfax, Virginia, USA

- Develop projects, lesson plans, and curriculum for woodshop, electronics, and metals
- Adapt instruction to suit classes with a wide variety of ages (elementary - highschool)
- Instruct students on CAD, electronics, digital manufacturing (laser cutter, vinyl plotter, FDM printers), as well as in wood and metal shop skills

PROJECTS

A Modern Clavichord | Industrial Design Senior Capstone Project | 2025 - 2026

For my undergraduate capstone project, I designed and built a clavichord intended for modern use. I began by researching the usage and mechanisms of several types of historical keyboards, and how these instruments could be used in a modern context. I then explored the mechanisms further through prototyping and using museum documentation to create 1:1 replicas/study models of historical instruments' mechanisms. Using formula spreadsheets and parametric modeling in SOLIDWORKS, I designed my own instrument plan. Lastly, I refined the model and added details like custom electromagnetic pickups and built the instrument.

Acacia Earrings | Finalist Project of the Kering Generation Award X Jewelry | 2026

The Kering Generation Award X Jewelry is a sustainability-focused competition that asks applicants to create a piece of fine jewelry that highlights a discarded material. I chose to make earrings from wood shavings. Using a combination of real wood shavings and gold replica shavings, I created delicate florets that made up the earrings. This project was selected as a finalist in the competition, and I presented my work at the awards ceremony in Paris.

Flat-Packed Corner Cabinet | Furniture Studio Final Project | 2025

This cabinet takes a different approach to flat-packed furniture. Instead of relying on thick sheet-goods held together with hardware for structure, it uses a puzzle-like step-by-step frame construction, where each step "locks" the previous joint in place with minimal hardware. I also produced engineering drawings and a construction guidebook.

Synthesis Blocks | *History and Technology of Musical Instruments* Final Project | 2024

I created physical toy blocks to illustrate the concept of additive audio synthesis. Smaller blocks are stacked on top of the base block and each add a different harmonic. This used a Raspberry Pi as a controller and was programmed in Python and PureData.

AWARDS AND CERTIFICATIONS

- Finalist in Kering Generation Award X Jewelry | **2026**
- RIT T-Minus "Best Overall Design" | **2024**
- Six Sigma Green Belt | **2023**
- Club Officer and Founding Member of Birding at RIT Club | **2022-2024**