

Amelie Grosserichter

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Design Engineer with fabrication, technical instruction, and makerspace experience

EDUCATION

Brown University, 3.8/4.0, Sc. B. in Design Engineering Providence, RI | Graduated December 2025

- **Fabrication & Prototyping:** 3D Printing, Laser Cutting, Woodworking, Metalworking, Rapid Prototyping, Arduino
- **Design & CAD:** Fusion 360, SolidWorks, Maya, Physical Modeling, User-Centered Design
- **Technical:** Python, MATLAB, Adobe Premiere Pro, Microsoft Office
- **Relevant Coursework:** Design Studio, Design of Mechanical Assemblies, Computer-Aided Visualization & Design, Design Briefing, Design for Divergence (RISD)
- **Languages:** Fluent in English, German, French (working proficiency), Spanish (Beginner)

TECHNICAL EXPERIENCE

Brown Design Workshop, *Monitor* Providence, RI | December 2022 – December 2025

- Supported students and independent builders across laser cutting, 3D printing, woodworking, metalworking, sewing, and CNC machining
- Led fabrication workshops and safety trainings for members using industrial shop equipment
- Mentored members through design iteration, prototyping strategy, and material/process selection
- Troubleshoot technical issues, managed shop resources, and ensured compliance with safety protocols
- Interviewed and onboarded new makerspace monitors; developed training protocols for new equipment

Brown Formula Racing, *Electronics Subsystem Member* Providence, RI | September 2022 – December 2025

- Collaborate with a team of 4 to develop and produce electrical harnesses for Brown's FSAE race car
- Produced components using CNC machining and other fabrication methods
- Designed and fabricated wiring harness systems for engine testing and diagnostics

Embrace Technologies, *Design Research Intern* Berlin, Germany | June 2023

- Contributed to development and optimization of the Espire respirator
- Researched respirator standards to evaluate how existing regulations limit inclusive design and compromise user safety

PROJECTS & RESEARCH EXPERIENCE

HERSTRIDES, *Ergonomic Cane Design for Women* | Design Briefing May 2025

- Designed a cane for women with arthritis through iterative prototyping using foam core modeling and 3D printing
- Conducted user testing with elderly residents and medical professionals to refine grip shape, wrist alignment, and aesthetics

Grip Gadgets | Engineering Projects May 2025

- Designed and prototyped four assistive attachment devices using rapid prototyping and 3D printing
- Developed functional prototypes including a weighted pencil grip, pill bottle opener, and thin-object grabber

Smart Pill Dispenser | Design of Mechanical Assemblies December 2024

- Designed a functioning, 3D-printed smart pill dispenser for people who need assistance managing medication independently
- Programmed an Arduino system, ensuring precise pill dispensing and integrating auditory and visual cues for user reminders

Study Aid | Special Topics Studio: Design for Divergence (RISD) December 2024

- Developed an arduino-controlled pomodoro study timer, integrating light, scent, and sound cues to enhance time management
- Conducted user research including interviews, observations, and user testing to tailor device to the recipient's study habits

Lissajous Figures | Gyro Gearloose: Machines of Dubious Usefulness (Wittelsbacher Gymnasium) June 2021

- Built experimental double-pendulum and oscilloscope systems to generate Lissajous figures through frequency and phase variation; awarded a Bavarian State Universities physics seminar prize

LEADERSHIP AND COMMUNITY ENGAGEMENT

Brown University, *Residential Assistant* Providence, RI | June 2022 – August 2022, June 2025 – August 2025

- Managed a ~60-student residential community, providing daily support, conflict mediation, and community engagement
- Responded to emergencies and facilitated hospital visits, completing 7 on-call shifts

Brown University, *Community Coordinator* Providence, RI | September 2023 – December 2024

- Developed programming for residential students through structured office hours and educational workshops
- Supported student development through one-on-one advising, peer engagement, and community-building initiatives

Brown University, *Program Assistant* Providence, RI | June 2024 – August 2024

- Led weekly STEM programs, excursions, and activities fairs to foster community and student engagement
- Managed residence hall logistics including check-in/out, key distribution, and room inspections