

Amelie Grosserichter

Phone: (401) 556-5629 | E-Mail: amelie_grosserichter@brown.edu | Portfolio: <https://www.ameliegrosserichter.com>

EDUCATION

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

- **Technical Skills:** MATLAB, SolidWorks, Fusion 360, Tinkercad, Adobe Creative Suite (Premiere Pro, Illustrator, Photoshop, InDesign), Maya, Microsoft Office
- **Related Coursework:** Calculus, Electronic Circuits & Signals, Fluid Mechanics, Object-oriented programming, Design of Mechanical Assemblies, Computer Aided Visualization and Design, Design Briefing, Design Studio, Context Research for Innovation, Computer Animation, Design for Divergence, Sustainable Design in the Built Environment, Disability & Culture

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 devices (door knob opener, thin-object grabber, weighted pencil grip, pill bottle opener) that attach to items to make them more accessible; developed free 3D models for low-cost assistive tech distribution

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

- Conducted theoretical research and practical experiments on Lissajous figures by building double pendulum construction and using an oscilloscope to create Lissajous Figures, adjusting frequency and phase shifts to validate predicted frequency ratios
- Awarded one of eight physics seminar paper prizes of the Bavarian State Universities and the Bavarian Regional Association in the German Physical Society

TECHNICAL EXPERIENCE

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

- Led workshops on metalworking, woodworking, 3D printing, laser cutting, and prototyping for groups of 6 members.
- Troubleshoot technical issues, and ensured compliance with safety protocols
- Provided individual mentorship to students on projects, helping them refine their prototyping and fabrication techniques
- Interviewed and onboarded new makerspace monitors; developed training 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
- Designed wiring harness for DYNomite Dynamometer to assist in testing of the race car engine prior to general assembly

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

LEADERSHIP AND COMMUNITY ENGAGEMENT

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

- Managed a residence hall of ~50 students, providing support through daily check-ins and weekly programs
- Responded to emergencies and facilitated hospital visits, completing 7 on-call shifts

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

- Provided mentorship and programming for residential students through office hours and educational programs

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

SKILLS & INTERESTS

Fabrication & Prototyping: 3D Printing, Laser Cutting, Metalworking, Woodworking

Languages: Fluent in **English, German, French** (working proficiency), Spanish (beginner), Latin (reading proficiency)

Interests: Painting, Figure Drawing, Animation, Writing