

Franny Stroik

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EDUCATION

University of Virginia (UVA) | Charlottesville, VA

August 2022 – May 2026

Bachelor of Science, Biomedical Engineering, & Data Science Minor

GPA: 3.97 | Dean's List: 2022 – Present

ACADEMIC EXPERIENCE

UVA, Enabling the Future (E-NABLE)

August 2024 - Present

Executive Board, Lead of CAD | Charlottesville, VA

- Commit 5 hours/week leading the design and fabrication of custom 3D-printed prosthetic limbs for underserved patients in collaboration with UVA's prosthetics team and clinical partners
- Oversee and train a student CAD team in Autodesk Fusion, adapting designs to patient-specific anatomical and functional needs
- Drive outreach and onboarding, representing UVA in the global E-NABLE network and aligning designs with clinical needs

UVA, Systems and Signals Engineering

September 2023 – December 2023

Team member, AFib Detection Project | Charlottesville, VA

- Developed a signal processing system in MATLAB to classify atrial fibrillation (AFib) vs. sinus rhythm using frequency-domain ECG analysis; validated with a confusion matrix
- Analyzed 6 trials of synthetic ECG data using high-pass filtering and Fourier transforms
- Presented findings to an audience of 40, proposing clinical integration for early AFib detection in wearable ECG systems

RELEVANT WORK EXPERIENCE

Pharmaceutical Research and Manufactures of America (PhRMA)

May 2025 - Present

Policy and Research Intern | Washington, D.C.

- Conduct research and draft strategy briefs on AI in drug development, Medicare Part B, vaccine innovation, and the Inflation Reduction Act (IRA), contributing to 6+ internal reports and 2+ external deliverables, extending throughout Fall 2025
- Serve as the primary translator between the Regulatory Affairs and Policy Department on Cell and Gene Therapy policy
- Delivered a 15-minute educational presentation to PhRMA's Policy and Research Department on Prescription Digital Therapeutics, including strategic recommendations for future policy and educational positioning

UVA, Department of Biomedical Engineering

August 2023 - May 2025

Letteri and Lampe Lab Undergraduate Research Assistant | Charlottesville, VA

- Conduct molecular dynamic simulations to investigate gelation patterns of peptide hydrogels
- Analyze experimental data to determine optimal treatments and experiments for CNS disorders
- Presented year-long research on salt concentration effects in peptide hydrogels at UVA's Undergraduate Research Symposium via poster session

UVA, Department of Biomedical Engineering

August 2024 - May 2025

Office Assistant | Charlottesville, VA

- Support department faculty and operations 4 hours per week by coordinating student-facing communications, organizing academic events, and leading tours that represent the department to prospective students and families
- Serve as a primary point of contact for student inquiries, executing academic programs and streamlining administrative tasks

LEADERSHIP EXPERIENCE

UVA Health, Prosthetics and Orthotics Clinic

August 2023 - Present

Shadow Volunteer | Charlottesville, VA

- Shadow certified prosthetists 4 hours/week during patient consultations and device fittings, observing biomechanical assessment techniques and anatomical considerations for custom prosthetic limbs and orthotic braces
- Assist with fabrication processes, gaining hands-on exposure to prosthetic technologies including microprocessor-controlled devices and patient-specific design methodologies

UVA, School of Engineering

August 2023 – Present

Tour Guide | Charlottesville, VA

- Lead weekly 2-hour tours for prospective students and families, offering insight into academics, admissions, and activities
- Selected to give specialized Biomedical Engineering tours, highlighting departmental research, lab facilities, and faculty strengths to support targeted outreach

SKILLS & RELEVANT COURSEWORK

Technical skills: Python, MATLAB, R, Autodesk Fusion, VMD, Microsoft Office Suite, Molecular Dynamic Simulations, Design of Experiments (DOE), NAMD, Research & Development

Relevant Coursework: Public Health: Population Data Analysis, Biomechanics, Tissue Engineering, Bio-transport, Physiology I & II, Systems and Signals Engineering, Computational Biomedical Engineering, Science and Technology Internship Program, Cell Biology, Ideas Lab: lab sequence in biomedical data analysis, clinical instrumentation, and device prototyping