

Curriculum Vitae/Resume - Kiera Fullick

EDUCATION

University of Colorado Boulder, *M.S. Architectural Engineering*

Boulder, CO | 2024 - 2026

Relevant Courses: Computer Simulation for Building Energy Systems, Optimizing Grid Connected Systems, Sustainable Building Design, Building Science and Engineering

Brown University, *B.S. Mechanical Engineering*

Providence, RI | 2020 - 2024

Relevant Courses: Advanced Fluid Mechanics, Structural Analysis, Computer Animated Visualization and Design, Renewable Energy Systems, Advanced Engineering Mechanics, Materials Science, Thermodynamics, Sustainable Design in the Built Environment

EXPERIENCE AND RESEARCH

PAE Mechanical Engineering Intern, *Intern*

Denver, CO | 2025

- Performed HVAC system design and analysis, including duct sizing, static pressure calculations, and ventilation load assessments for multifamily, educational, and commercial projects.
- Assisted in equipment selection and schedule development for heating, cooling, and ventilation systems.
- Created and revised Revit models and construction drawings, including ductwork, piping, and mechanical equipment layouts.

ML Structural, *Structural Engineering Intern*

Palatine, IL | 2024

- Assisted in the design and analysis of structural components for commercial and educational projects using Revit and Tekla
- Conducted preliminary structural calculations and assessment of existing building conditions to determine load-bearing capacities and material requirements in support of senior engineers in design development
- Supported the development of construction documents, including reviewing shop drawings and submittals for compliance with design intent and code specifications

Breuer Lab Surfing Birds Research, *Undergraduate Researcher*

Brown University | 2023 – 2024

- Worked with a team of researchers to run an experiment that analyzed the mechanics and energetics of bird flight through recording position, wing beat frequency, and velocity of birds flying in Brown University's wind tunnel
- Designed and constructed a prototype tail for a wing-flapping robot to measure the effect of bird tails on lift and drag forces during flapping flight
- Coordinated experiment results with various lab members to effectively present data at Brown's Annual Research Symposium

RELEVANT PROJECTS

Eaton Humanities Building Energy Model and Upgrades, *AREN 5080: Computer Simulation for Building Systems* CU Boulder | 2024

- Utilized CAD documents to create an accurate model of CU's Eaton Humanities building in eQuest
- Tuned the model to match previous year's utility data for accurate estimates of annual energy consumption and cost
- Proposed energy efficiency measures based off energy end-uses and performed Life-cycle Assessments to determine feasibility and effectiveness of each measure

Sciences Library Viewing Deck Proposal, *ENGN 1300: Structural Analysis*

Brown University | 2022

- Completed site analysis and created a Rhino rendering for an addition to the Brown University's Sciences Library
- Modified the proposed addition's design to safely accommodate the wind, snow, and live loads as determined by modeling in Abaqus and Solidworks
- Utilized local cost of materials to determine the proposal's commercial viability through cost analysis

LEADERSHIP AND ACTIVITIES

CU Boulder Solar Decathlon, *Team Lead*

Boulder, CO | 2024

- Led a multi-disciplinary team of students in designing a sustainable, affordable multifamily housing unit for the U.S. Department of Energy international collegiate competition
- Facilitated team meetings and delegated responsibilities to drive ongoing site analysis, selection of affordable and sustainable materials, and building energy modeling to enhance building performance and efficiency

Brown Varsity Women's Soccer Team, *D1 Athlete*

Providence, RI | 2020 – 2024

- Developed the ability to work well under pressure, organize and lead large groups of people, manage time and resources productively, and work closely with people from diverse backgrounds while competing in D1 athletics
- 25+ hours/week of training, competition, film review, travel, and meetings while maintaining a full course load and part time employment

SKILLS & INTERESTS

Technical Skills: Revit, eQuest, Rhino & Grasshopper in Rhino, Solidworks, Matlab, Mathematica, Microsoft Office, Adobe Photoshop, Adobe Lightroom, Autodesk Fusion, Python

Language: Certified Biliterate for Spanish (Illinois State of Biliteracy Award)

Interests: Mountain Biking, Photography, Architecture, Reading, Kickboxing