

# JARED RIFKIN

rifkin@virginia.edu

(631) 626-3153

Center for Applied Biomechanics

Charlottesville, VA

## OBJECTIVE

A graduate bioengineering student simultaneously pursuing a BSE and MSE with knowledge in a variety of subjects from finite element modeling to computer science seeking employment and further experience related to biomechanics.

## EDUCATION

### University of Pennsylvania

Bioengineering

2016-2019

BSE, MSE

GPA: 3.89, 3.91

Dean's List 2016-2019

### University of Virginia

Mechanical and Aerospace Engineering

2020-present

PhD

Center for Applied Biomechanics

## SKILLS

### Biomechanical Modeling

Finite element ♦ Multibody ♦ LS-DYNA  
Brain and neck deformation models

### Programming

MATLAB ♦ Python ♦ C# ♦ HTML  
Raspberry Pi ♦ Arduino ♦ Unity

### 3D Printing and Design

SolidWorks ♦ Creo Parametric

### Human-Cockroach Prosthetic Interface

Processed human EMG inputs to control  
cockroach leg

### Statistical Analysis

Causality ♦ Significance testing

### Mechanical Testing

Material characterization  
Tensile and compressive testing

## EXPERIENCE

### Panzer Lab | Graduate Research Assistant | August 2020 – Present

University of Virginia Center for Applied Biomechanics

Research focuses: traumatic brain injury | cerebrovasculature | finite element modeling

Conducts material characterization tests for development of protective headwear ♦ Studies the material properties of brain vasculature ♦ Performs finite element analysis

### Meaney Lab | Researcher | March 2017 – July 2020

University of Pennsylvania Bioengineering

Research focuses: traumatic brain injury | multibody brain model development | brain networks

Performed multidimensional optimization of biomechanical parametric space ♦ Laboratory animal care ♦ Website design ♦ Studied neural dynamics models to understand how brain architectures can be grouped

### BE Senior Design | Teaching Assistant | August 2019 – May 2020

University of Pennsylvania

Mentored students working on capstone project ♦ Acted as conduit between professors and

students ♦ Graded students and provided feedback for improvement ♦ Aided professors in future course development

## PUBLICATIONS

David Gabrieli, Nick Vigilante, Rich Scheinfeld, **Jared Rifkin**, Samantha Schumm, Taotao Wu, Lee F. Gabler, Matthew B. Panzer, David F. Meaney. **A multibody model for predicting spatial distribution of human brain deformation following impact loading.** (2020). JBME

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University of Pennsylvania Biology

Weekly lab upkeep ♦ Autoclaved and sterilized glassware ♦ Stocked shelves ♦ Webmaster

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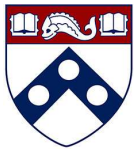
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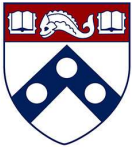
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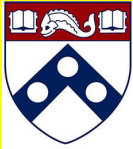
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