

Permanent Address:
441 Doodletown Rd
Ancram, NY 12502

Benjamin P. Kuster
bpk8zz@virginia.edu | 914-525-
3433

School Address:
1510 Virginia Ave Apt. 302
Charlottesville, VA 22903

EDUCATION

University of Virginia (UVA), School of Engineering, Charlottesville, VA August 2019 - May 2023

Major: B.S. in Materials Science and Engineering

Minors: Computer Science and Applied Mathematics

- GPA: 3.95/4.0
- Relevant coursework: Multivariable Calculus, Differential Equations, Thermodynamics, Introduction to Polymers, Software Engineering

WORK & PROJECT EXPERIENCE

Polymers Research Analyst, UVA, Charlottesville, VA October 2021-Present

- Working in a lab which specializes in adaptive polymeric materials and 3D printing biomaterials
- Personally synthesizing self adhesive block copolymers for adaptive materials applications

Website Development Project, UVA, Charlottesville, VA

August 2021 – December 2021

- Constructed assignment organizer website where users could upload public or private tasks.
- Written in Python with the Django framework, hosted on Heroku

Research and Development Intern, Bright Lite Structures, Stamford, UK.

June 2021 - July 2021

(Developer of patented carbon fiber composite technology for use in aircraft and motor vehicles)

- Rotated through three areas of the company during eight-week internship: R&D, Production and Design
- Produced sample parts to test new compositions, and materials and full-sized final products to be used in truck floors and airline seats
- Engaged in Mercedes CatiaV5 3D modeling training program

Patent Application Project, UVA, Charlottesville, VA

September 2019 – December 2019

- Led a team of four others in designing a Compost Based Water Heater to increase food recycling and reduce water heating energy consumption
- Drafted Professional Patent Application (PPA), citing former works and detailing our new innovations

Materials Investigation Project, UVA, Charlottesville, VA

March 2021- May 2021

- Operated five materials characterization lab devices to diagnose and explain the macro- and microstructure of different coins from around the world
- Presented findings to a committee of professors and peers at end of investigation

SKILLS

- **Coding Languages:** Java, Python, MATLAB, C++
- **Data Analysis Tools:** Excel, Origin Pro, PASCO Capstone, CatiaV5, Solidworks, Autodesk Inventor
- **Lab Devices:** Vicker's Indenter, Rockwell Indenter, Thermocouples, Furnace, Rolling Mill, Instron, Scanning electron microscope, Electron dispersive spectroscopy, X-ray diffraction

LEADERSHIP & ACTIVITIES

- **Charter Member, Materials Advantage Chapter, UVA, Charlottesville, VA** Fall 2020- Present
- **Trombone Player, Jazz Band, UVA, Charlottesville, VA** Fall 2019 - Present
- **Men's Club Ultimate Frisbee, UVA, Charlottesville, VA** Fall 2019 - Present
- **Founder, Ultimate Frisbee Team, Rye High School, Rye, NY** January 2018 - May 2018