

# BENJAMIN STRAUCH

Potomac, MD 20854

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## EDUCATION

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### University of Maryland

A. James Clark School of Engineering  
Mechanical Engineering Major

College Park, MD

Expected Graduation: May 2024

## TECHNICAL EXPERIENCE

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### Powertrain and Aerodynamics Engineer

College Park, MD

*Terps Racing*

August 2022 – Present

- Utilized SOLIDWORKS FEA in order to model structural CAD for engine dynamometer to assist powertrain subteam in engine data acquisition
- Led research and development for novel rear wing design in SOLIDWORKS by applying principles of fluid flow, aerodynamics and physics
- Analyzed STAR CCM+ photos in order to find and resolve airflow blockages, vortices and drag

### CAD Engineer and Print Technician

Potomac, MD

*Ben's 3D Prints*

December 2021 – Present

- Founded and ran a small 3D printing business, modeling and printing various simple parts for customers, using Solidworks and Cura to model and slice, providing a \$700 profit, and hours of CAD practice
- Utilized two 3D printers across 1000 hours of printing, in order to produce a wearable Iron Man armor, comprising 3 electromechanical systems in the helmet, chest and limbs

## WORK EXPERIENCE

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### Project Engineer, Virginia Tech ICAB

Alexandria, VA

*The Whiting-Turner Company*

June 2023-August 2023

- Assisted senior field engineers with management of over 20 subcontractors and 300 workers across 300,000 square feet of job site, using means such as quality checks, tracking logs, and attending meetings in order to contribute to problem solving efforts
- Supported office engineers in management and optimization of a \$225,000,000 dollar budget, by means of analyzing project data, such as cost estimates, material quantity calculations, in addition to pinpointing flaws in building plans and aiding architects in finding solutions

### Assistant Manager

Potomac, MD

*Pool Personnel Inc.*

May 2017 – August 2021

- Managed and scheduled a team of 15 guards over 75 hours of operation per week, collaborating with board members for holiday events, and assisted in coordinating MCSL swim meets over the summer
- Maintained a 250,000 gallon pool by monitoring chemical levels to maintain legality, scheduled and performed maintenance, maintained pool and deck cleanliness, performed janitorial duties and patron assistance for 200 members, as well as first aid and lifesaving duties

## ACTIVITIES

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### Rush Committee, Away Weekend Chair

*Zeta Beta Tau Fraternity*

January 2020 – Present

- Interviewed and evaluated upwards of 200 potential new members
- Organized and delegated tasks for various social events throughout the semester
- Researched, coordinated and executed transportation and housing logistics for 150 people for a fraternity away weekend
- Learned skills in teamwork, collaboration, and assessing individuals' strengths and weaknesses without bias

## TECHNICAL SKILLS

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- Software: Solidworks, Fusion360, Cura, STAR CCM+, PrusaSlicer
- Code: MATLAB, C++, HTML, JavaScript,
- General: Microsoft Office, Adobe Suite, DaVinci Resolve

\*References available upon request\*