Mohsin Haider

EDUCATION

Duke University, Pratt School of Engineering *Expected May 2023*
B.S.E Mechanical Engineering *Cumulative GPA: 3.87/4.0*

EXPERIENCE

Apple *Cupertino, CA*
iPhone Product Design Intern *May 2022—Aug 2022*

Apple *Remote*
Apple Watch Product Design Intern *Jan 2021—Sept 2021*

- Led mid-stage development for the Apple Watch Ultra barometric vent (b-vent) membrane.
- Improved b-vent water exposure performance via die-cut design and material investigation.
- Worked with cross-functional teams to improve vendor-level water exposure test procedures.

Whoosh: Retractable Heelys *Durham, NC*
Designer and Fabrication Engineer, Product Design Class *Jan 2022—May 2022*

- Used Fusion 360, waterjet cutting, and CNC milling to design and manufacture a custom functional pair of retractable roller heel shoes.
- Reduced switching time between walking and rolling by ~90% compared to legacy product.

PROTECT3D *Durham, NC*
Product Design Intern *Oct 2021—Dec 2021*

- Led product development for new custom medical device category from concept to patient trial.
- Investigated SLA and DLP printer resin options for product material selection.
- Implemented documentation practices to encourage intentional design and organization.

Blur Product Development *Cary, NC*
R&D Engineering Intern *May 2020—Aug 2020*

- Designed a stepper motor-based test fixture in SolidWorks for use in virus and bacteria labs.
- Generated BOMs and engineering drawings, communicating with machinists and manufacturers.

DesignHub, Duke University *Durham, NC*
Design Engineer *Aug 2019—Present*
Rapidly prototyped as a contract engineer for internal Duke clients pursuing research/entrepreneurial ventures. Consultant for faculty, staff, and students on SolidWorks, Fusion 360, CAM, and design.

Project: Eye Forceps*, Duke Eye Center* *Nov 2019—Mar 2020*

- Designed and 3D-printed prototypes of an improved cataract surgery tool in SolidWorks.
- Collaborated with an ophthalmologist to meet design constraints of the operation.

Project: Smart Toilet Seat, *The David Lab at Duke University* *Jun 2019—Dec 2020*

- Used Fusion 360 and SolidWorks FEA to design a patent-pending medical device.
- Created enclosures for and calibrated optical, sound, and load sensors.

SKILLS AND EXPERTISE

Skills and Technical Knowledge

- **Design:** NX, SolidWorks, Fusion 360, CAD, FEA, DFM, GD&T, Drafting, CAM, CNC Milling, 3D Printing
- **Programming**: Python (*Intermediate*), Arduino (*Intermediate*), MATLAB (*Beginner*)
- **Soft Skills:** Flexibility, Problem-Solving, Communication, Collaboration, Interdisciplinary Work

Relevant Coursework

- Statics, Dynamics, Physics, Controls, Thermodynamics, Fluid Mechanics, Product Design, Mechatronics

Interests

- Product Design, Consumer Products, Health Technology, Music Production, Soccer, Gaming, Skateboarding