Mohsin Haider

EDUCATION

Duke University, Pratt School of Engineering *Expected May 2023*
B.S.E Mechanical Engineering, Innovation and Entrepreneurship Certificate *Cumulative GPA: 3.89/4.0*

EXPERIENCE

Apple Inc. *Remote*
Product Design Intern *Jan 2021—Sept 2021*
- Apple Watch Product Design Team

PROTECT3D *Durham, NC*
Product Design Intern *Oct 2021—Dec 2021*
- Led product development for new custom medical device category from concept to patient trial
- Implemented documentation practices to

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.
- Designed an additional test fixture in SolidWorks for testing long term UV exposure effects.
- Generated BOMs and engineering drawings, communicating with machinists and manufacturers.

Smartphone-Controlled Electric Skateboard *Durham, NC*
Designer and Fabrication Engineer *Sep 2019—Aug 2020*
- Used Fusion 360, waterjet cutting, and CNC milling to design and manufacture a custom Bluetooth-enabled motor attachment for Penny® skateboards.
- Created iOS app to interface with Arduino in order to control the motor attachment.

DesignHub, Duke University *Durham, NC*
Design Engineer *Aug 2019—Dec 2020*
Rapidly prototyped as a contract engineer for internal Duke clients pursuing research or 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.

Automatic Skunk Feeder, *Museum of Life and Science* *Durham, NC*
Fundamental Engineering Design Class *Aug 2018—Dec 2018*
- Collaboratively created a set of Arduino-automated food dispersal devices for captive animals.
- Communicated with museum staff to create a naturalistic and safe feeding method.

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
- Fundamental Engineering Design, Engineering Innovation, Analysis, Statics, Dynamics, Controls, Thermodynamics

Interests
- Product Design, Consumer Products, Mechanical Design, Music Production, Soccer, Gaming, Skateboarding