## **Brooks and Brian Prototyping Services**



## **CNC Machining**

- Create high-precision, functional prototypes using CNC milling and turning
- Work with a wide range of materials, including metals, plastics, and composites
- Produce complex geometries and tight tolerances for accurate product representation
- Offer quick turnaround times for iterative design and testing

#### 3D Printing

- Utilize state-of-the-art 3D printing technologies, such as FDM, SLA, and SLS
- Create rapid prototypes for form, fit, and function testing
- Produce high-resolution, detailed parts with a variety of materials
- Enable quick design iterations and cost-effective low-volume production

#### Rapid Prototyping

- Combine CNC machining, 3D printing, and other techniques for fast prototype development
- Create prototypes suitable for functional testing, user feedback, and investor pitches
- Streamline the product development process and reduce time-to-market
- Support agile design and engineering practices for continuous improvement

### Prototyping for Manufacturing

- Develop prototypes that accurately represent the final product, including materials and finishes
- Validate manufacturability and identify potential production challenges early in the design process
- Create detailed assembly instructions and quality control procedures

• Collaborate with manufacturing partners to ensure smooth transition to production

# Prototype Testing and Validation

- Conduct thorough testing and validation of prototypes to ensure functionality and reliability
- Perform dimensional accuracy checks, tolerance stack-up analysis, and interference testing
- Evaluate prototypes for user experience, ergonomics, and aesthetics
- Provide detailed reports and recommendations for design improvements