Xiaoxiang Ma

Education

Cornell University, Ithaca NY

May 2021

B.S. Information Science

Minor in Design and Environmental Analysis

Experience

Composite / Ergonomics engineer • Cornell Baja

September 2018 - Present

- Currently designing and manufacturing the seat and body panels of an off-road vehicle to participate in the BAJA SAE competition
- Building a prototype seat in Solidworks
- Constructing mannequin testing in Solidworks to acquire areas of discomfort
- Manufacturing body panels with carbon fiber composite

Research Assistant • Cornell University HCI Design Lab June 2018 - Present

- Designed and implemented yarn extruding mechanism for 3D crochet machine
- Designed and motor powered yarn clamp for 3D crochet machine
- Created Gcode commands for extruder movement control
- Designed and produced 3D-printed parts including extruder, gear racks, and motor brackets
- Created Python converter scripts to translate Fusion360 commands into Gcode

Usability / UX engineer • *Spect*

May 2018 - Present

- Designed digital UI for Spect mobile app
- Developed front-end app interface in Unity for IOS and Android
- Conducted usability testing for stakeholders to improve product strategy
- Worked with product team to implement updates based on customer feedback

Activities

Creative designer

Guac Magazine

Nov 2017 - Present

Designed content & layouts for 3 series of published travel magazine

Content designer

International Students Union

Sept 2017 - Present

Created graphic designs for International Gala and ongoing cultural events

Airframe designer

Cornell Rocketry Team

Fall 2017

Designed and manufactured separable wiring module for the recovery systems and structure of NASA SL competition rocket

Skills

Design:	Engineering:
Sketch	Solidworks
Illustrator	Rhino 3D
Photoshop	Java
InDesign	Python
InVision	Unity
HTML5	Arduino
CSS3	C#

Relevant Coursework

- OO Programming & Data Structures
- Networks
- Visual Literacy & Design Studio
- Design and Programming for the Web