

MATTHEW WINCHELL

winchell587matthew@gmail.com

www.matthewwinchell.com

EDUCATION

Worcester Polytechnic Institute

B.S. in Robotics Engineering

Expected 2025

Worcester, MA

The Athenian School

High School Diploma

2021

Danville, CA

RELEVANT EXPERIENCE

Legacy Effects

Mechanical Design Intern

January 2023 - Aug 2023

Los Angeles, CA

- Designed mechanics for a small-scale animatronic that utilizes cable driven pulley assemblies using nylon mlf processes
- Designed a telemetry armature assembly for a large-scale principle animatronic character under a prominent IP
- Assisted on three feature films, a television show, and a commercial
- Learned and applied body-shop techniques to construct a large-scale model for an upcoming television show under a prominent IP

Animax Designs

Mechanical Engineering Intern

May 2022 - Aug 2022

Nashville, TN

- Created mechanical designs in Solidworks for Harry Potter animatronics
- Collaborated with fellow interns to create a fully-articulate puppet in the likeness of a Muppet
- Worked with external stake holders for project requirements and scope changes

Northern Lights School

Engineering Volunteer

Nov 2019 - Dec 2020

Oakland, CA

- Established a 3D printing STEM program for middle school students
- Created documentation for troubleshooting both the mechanics of 3D printers and slicer software

SKILLS

Software & Technologies: Solidworks, Turning, Milling, ZBrush, 3D Printing, 3DS Max, Java, C++

Practical Effects: Animatronic design, motion-control, model making

PROJECTS

Grogu Animatronic

Jan 2021 - Present

- Created mechanisms, silicone molds, and custom code for fully-articulate Grogu

Motion-Controlled Camera and Miniature Rig

Dec 2019 - Present

- Created a 3D printable motion-control camera and miniature rig for shooting miniature special effects as seen on the Mandalorian tv series

BB-8 Animatronic

Jan 2017 - June 2021

- Combined 3D printing, electronics, mechanical parts, and special effects to recreate fully-functional BB-8

8.5 foot Star Destroyer Model

December 2021 - Present

- Using a combination of MDF, plywood, 3D printed parts, and lights to recreate the 8.5-foot star destroyer model filmed for the Empire Strikes Back

INTERESTS

Cooking, guitar, film photography, audio media, ultimate frisbee