

Michael J. Luchini

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7 Dudley Ave.
Branford, CT, 06405

EDUCATION

Boston University College of Engineering, Boston, MA Expected Graduation May 2020
Bachelor of Science in Mechanical Engineering, concentration in manufacturing

SKILLS

Additive Manufacturing, Altair Inspire, Arduino, CAD, GibbsCAM, MATLAB, MeshMixer, nTopology

PROFESSIONAL AND LEADERSHIP ACHIEVEMENTS

InnovaSurgical; Branford, CT May 2019-September 2019
Project Manager

- Lead research and design of a classified project pertaining to medical devices and their application in the operating room
- Researched how medical devices are implemented for various orthopedic and arthroscopic surgeries in operating rooms at multiple locations
- Coordinated with medical device vendors
- Collaborated with product developers
- Developed a final working concept to be outsourced for manufacturing

Shoreline Industries; New Haven, CT May 2017-September 2018
Engineering Intern

- Interpreted blueprints for New Haven school district piping/structural components
- Troubleshooted piping systems, identifying irregularities and potential problems
- Dispatched appropriate employees

Boston University College of Engineering; Boston, MA September 2018-December 2018
Laboratory Assistant

- Provided classroom support
- Advised students on material selection and use of resources
- Ordered materials for engineering design projects
- Distributed parts to students for engineering design projects

Yale New Haven Sponsor Hospital EMS; New Haven, CT April 2015-August 2015
Nationally Registered Emergency Medical Technician

- Received training for and passed NREMT exam to become a nationally certified EMT
- Shadowed emergency room technicians and EMTs on ambulances and in emergency rooms
- Received CPR certification

DESIGN PROJECTS COMPLETED

“DaVinci Robot Haptic Feedback Gloves”

- Currently collaborating with a team of engineers to design soft robotic gloves that provide haptic feedback to surgeons when using the DaVinci surgical robot
- Produced a prototype using pneumatic actuators which receive signals from a pressure sensor

“Single FDM Print Dynamic Mechanisms”

- Designed three dynamic mechanisms, working through multiple failed iterations
- Developed a standardized process to create any amount of layered dynamic joints, gears, or threaded rods in a single printed part

“Latticed Water Bottle Holder”

- Designed a custom-fit latticed water bottle holder for a bicycle using SolidWorks and nTopology
- 3D printed using a FormLabs Form 2 printer using customized supports and draft resin

“Beachcomber”

- Designed and built a beachcomber using wheelchair motors, riding lawnmower wheels, an electric scooter motor, an RC controller, and various other parts
- Used to clean waste and dead vegetation from beach and can be converted to operate as a snowplow

AFFILIATIONS and ACTIVITIES

BU Rocket Propulsion Group, BU UAV Team, Special Olympics Connecticut