JONATHON MONTINI

mechanical engineer

CONTACTS

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PROJECTS

NYPD Mobile Command Centers

Goal: Provide a lightweight composite armor solution 360 degrees around each vehicle

– Promoted to the lead project engineer to manage this program with the NYPD.
– Identified manpower requirements, coordinated outside support, forecast cost impacts, and managed the project schedule.
– Collaborated with a niche team to generate a repeatable manufacturing procedure in a timely manner, while taking ownership of process development along the way.
– Performed reverse engineering on nearly 100 vehicles using laser scanning to integrate armor components perfectly within the vehicle.
– Created engineering drawings and provided direct engineering support to the technicians.

ATTACK MATS

Goal: Integrate Weathertech floor mats into a ballistic shield for police officers

– Prioritized customer feedback and developed metrics/ targets.
– Designed prototypes, created engineering drawings, and performed ballistic tests.
– Established a one-of-a-kind shield design for Police officers.

SKILLS

Computer-Aided Design

– Solidworks
– Autocad
– VX Elements/Model (surface modeling)

Machinery & Processes

– 3D Printing
– CNC Laser / CNC Bender / Gerber operation
– Universal Robots
– LAP Laser Projection

EDUCATION

UNIVERSITY OF DELWARE

SPRING 2021 – FALL 2023 (Anticipated)
Master of Mechanical Engineering

FALL 2019 – FALL 2020
Graduate Certificate Program Composites Engineering

SPRING 2017
Bachelor of Mechanical Engineering

WORK EXPERIENCE

HARDWIRE LLC / *Design Engineer*

SPRNG 2017 - PRESENT

– Implement designs on new products and create innovative solutions for composite armor protection on vehicles, infrastructures, and personnel.
– Perform iterative prototyping to develop precision tooling tailored to various processes such as: hot forming steel, thermal forming plastics, and vacuum forming composites.
– Experience with hand layups when using materials such as Dyneema prepreg, Kevlar, Carbon Innegra, Fiberglass, and TP film adhesives on aluminum molds.
– Responsible for creating engineering drawings, diligently working with machinists and technicians, and following project timelines.
– Communicate effectively with team-members to exercise creative problem-solving techniques that help aid the manufacturing facility. For example, designing automated machines to increase production rates involves collaboration with both the electrical and manufacturing engineers.

UNIVERSITY OF DELAWARE / *Research Assistant*

DECEMBER 2016 - MAY 2017

– Coordinated test procedures for further development of a 3D concrete printer with advising professor
– Analyzed test results and made process improvements

ACTIVITIES

– Delaware Club Soccer
– Sigma Pi Iota Beta Chapter
– Hobbies: Kite Surfing, Snowboarding, Woodworking