Sang Kim

(770) 375-6560 | skim3669@gmail.com | sang-kim.github.io | US Citizen

EDUCATION

New York University
New York, NY | Aug 2016 – May 2020
B.S. Mechanical Engineering
GPA: 3.27 | Major GPA: 3.51
Honors: Dr. Morris Young Outstanding Project Award – WOOMBA; Dean's Award – Parking Lot Project
Organizations: ASME, SASE

SKILLS

Software:
SolidWorks, AutoCAD, ANSYS, KeyShot, MATLAB, LabVIEW

Processes:
GD&T (ASME Y14.5-2009), R&D, Developmental Design, DFA/DFM, Rapid Prototyping (Bench Tools, Power Tools, 3D Printing, Laser Cutting, 3-Axis CNC)

Misc. Tech:
Mac, Windows, Adobe Creative Suite, Microsoft Office, Raspberry Pi, Arduino, BASH, GIT

Certifications:
OSHA 30 Hour

EXPERIENCE

Dash 7 Design / Anish Kapoor | Project Manager
New York, NY | Jul 2020 – current
- Streamlining remediation of a 20 ft tall, 40-ton, stainless steel art installation sculpture by creating multiple progress management sheets in MS Excel, decreasing project lead times by up to 50%
- Interfacing with sub-contracted engineers to design load transfer props utilized in cable suspending the sculpture
- Producing/managing BOMs and DXF files for CNC fabrication of load transfer props (est. cost of $16,0000)
- Assisting engineers and welders on-site by preparing remediation material using angle grinders and portable band saw

NYU Dibner IT | Specialized Design Lead
New York, NY | Nov 2018 – Apr 2020
- Collaborated with hardware and software engineers to implement a population density tracking system in an NYU library
- Designed and 3D printed housing units for over 500 sonar sensors and 50 Raspberry Pi's with PCBs using SolidWorks
- Implemented tamper-proof screws in RPI/PCB case design to secure over $1000 of hardware and minimize presence
- Drafted floorplans with electrical schematic to reduce installation lead time by 50% using AutoCAD and SolidWorks

MakerBot Industries | Materials & Test Engineering Intern
New York, NY | Sep 2019 – Dec 2019
- Automated a material testing apparatus to double testing speed using an integrated LabVIEW program
- Developed data processing script in R to generate material behavior graphs from imported raw testing data
- Presented testing data, testing procedures, and material characteristic to VP of Engineering and senior test engineers

PROJECTS

WOOMBA | Lead Design Engineer
New York, NY | Aug 2019 – May 2020
- Designed the framework of a compact, remotely operated trash-removal water vehicle (ROV) using SolidWorks
- Reduced empty weight of ROV by 25% and optimized material selection using static structural simulations in ANSYS
- Optimized layout of conveyor belt sub-assembly, payload bin, and electronics to improve dynamic stability of ROV by 70%

NYU SAE Aero | Design & Manufacturing Engineer
New York, NY | Oct 2018 – Apr 2019
- Redesigned wing box and fuselage using SolidWorks Simulations after failed test flight, reducing empty weight by 30%
- Implemented manufacturing standards to rebuild the aircraft in 90 hours, reducing construction time by over 75%
- Reduced stress concentration on center wing box by 60% through static structural analysis in SolidWorks Simulations