Sang Kim

New York, NY

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Education

New York University — *New York, NY*

B.S. Mechanical Engineering, Major GPA: 3.51/4.00, Cumulative GPA: 3.27/4.0 — *Aug 2016 - May 2020*

- **Dr. Morris Young Outstanding Project Award**:"WOOMBA", Spring 2020 ; **Dean's Award**:"Parking Lot Project", Spring 2020
- **Organizations**: Othmer Hall Council, ASME, Society of Asian Scientists and Engineers

Experience

Dash 7 Design - Anish Kapoor Sculpture — *New York, NY*

Field Engineer — *Jul 2020 - current*

- Streamlining weld remediation of a 20 ft tall, 40 ton, stainless steel bean sculpture by creating and managing multiple working progress 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 and managing control sheets and DXF files for CNC fabrication of the 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

WOOMBA — *New York, NY*

Lead Design Engineer — *Aug 2019 - May 2020*

- Designed and managed the framework of a remotely operated trash-removal water vehicle (ROV) using SolidWorks
- Reduced empty weight of ROV by 25% and optimized material selection using ANSYS Workbench static structural simulations
- Optimized layout of conveyor belt sub-assembly, payload bin, and electronics to improve dynamic stability of ROV by 70%
- Developed 2D drawings (manufacturing and information) and worked with machinist to water jet cut parts

NYU Dibner IT — *New York, NY*

Specialized Design Lead — *Nov 2018 - Apr 2020*

- Collaborated with hardware and software engineers to implement a population density tracking system in a library
- Designed and 3D printed housing units for over 500 sonar sensors and 50 Raspberry Pi's with custom 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 — *New York, NY*

Materials and Test Engineering Intern — *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 material testing data, testing procedures, and material pros/cons to VP of Engineering and senior test engineers

NYU Aerospace - SAE Aero Advanced Class — *New York, NY*

Design and Manufacturing Engineer — *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

Skills

Software	SolidWorks, AutoCAD, CATIA v5, KeyShot8, ANSYS Workbench (Structural Analysis), MATLAB, LabVIEW
Processes	DFA/DFM, 2D Drafting/Drawing, GD&T, SolidWorks Product Data Management
	3D Printing, Laser Cutting, Waterjet, CNC, MIG Welding, Design Calculation
Misc. Tech.	Mac, Windows, BASH, Git, Adobe Creative Suite, Microsoft Office, Raspberry Pi, Arduino
Certifications	OSHA 30 Certification