Sang Kim

New York, NY

📞 (770) 375-6560 | ✉ sang.kim@nyu.edu | 🏠 sang-kim.github.io | US Citizen

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**:"The ParkingLot 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*

- Designing and fabricating steel components for sculpture remediation using SolidWorks and ANSYS Workbench
- Streamlining management of over 2000 weld inspection data points (daily) for ANSYS structural and thermal analysis
- Collaborating with structural engineers to optimize analysis parameters to reduce project lead time by 25%

WOOMBA *New York, NY*

Lead Design Engineer *Aug 2019 - May 2020*

- Designed and managed the master assembly of a payload carrying remotely operated vehicle (ROV) using SolidWorks
- Reduced empty weight of ROV by over 25% using ANSYS Workbench static structural simulations
- Optimized ROV design and configuration to improve dynamic stability by 70% and double surface area for interfaces
- Developed 2D drawings (manufacturing and information) and worked with machinist to validate design specifications

NYU Dibner IT *New York, NY*

Specialized Design Lead *Nov 2018 - Apr 2020*

- Collaborated with hardware and software engineers to spearhead the implementation of a population density web app
- Prototyped housing units (SolidWorks) for over 500 ultrasonic sensors and 50 microcomputers utilized in human detection
- Implemented anti-theft features in microcomputer cases to secure over $1000 of hardware using SolidWorks Simulations
- 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)
Processes	DFA/DFM, 2D Drafting/Drawing, GD&T, SolidWorks Product Data Management
	Rapid Prototyping (3D Printing, Machining, Laser Cutting, Waterjet), Design Calculation
Languages	RStudio, MATLAB, Python, LabVIEW, HTML/CSS, JavaScipt, Bootstrap
Misc. Tech.	Mac, Windows, BASH, Git, Adobe Creative Suite, Microsoft Office, Raspberry Pi, Arduino
Certifications	OSHA 30 Certification