

Alisa Mizukami

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Portfolio: AlisaMizukami.com

EDUCATION

Macaulay Honors College at The City College of New York, New York, NY
Bachelor of Engineering, Mechanical Engineering

GPA: 3.71
December 2020

SKILLS

Computer Skills: ANSYS (Workbench, Mechanical APDL, Fluent); MATLAB; SolidWorks (Simulation, HSMWorks); Oracle Crystal Ball; Microsoft Excel; PowerPoint; Word

Certifications: OSHA 30-Hour Construction, Six Sigma White Belt

Language: Fluent Japanese

RELEVANT WORK EXPERIENCE

Engineering Fellow, NYC Office of the Comptroller, New York, NY June 2021 – Present

- Review construction claims by verifying details with the Agency and Contractor and writing reports recommending a resolution to the Bureau of Law and Adjustment

Research-Development-Design Intern, Actasys, Brooklyn, NY June 2020 – January 2021

- Designed and tested nozzle attachments to synthetic jet actuators, increasing jet width by 50%.
- Constructed 13 actuator drivers to make compatible with current actuator design.

Advanced Manufacturing Apprentice, Zahn Innovation Center, New York, NY September 2019 – May 2020

- Manufactured client-requested products by lathing, milling, laser cutting, and using hand tools.

Structures Intern, Pratt & Whitney, East Hartford, CT June 2019 – August 2019

- Conducted a modal analysis of high-pressure turbine blades mounted in testing blocks by FEA using ANSYS MAPDL to obtain contours of displacement and principal stresses.

Technical Intern II, BAE Systems Inc., Nashua, NH January 2019 – May 2019

- Performed statistical tolerance analysis using Crystal Ball by compiling dimensions from engineering drawings and CAD models in spreadsheets to conclude the feasibility of changing a part design.

ACADEMIC PROJECTS

Senior Design: Personal Fire Escape System January 2020 – December 2020

- Worked as a team of 6 to design a window escape system that descends a user at a constant speed, regardless of weight. Project can be found here: amizuka000.github.io/fireescape/

SolidWorks Simulation: Static Analysis of a Clothes Hanger Fall 2019

- Worked as a team of 4 to conduct experiments and compare outcomes with FEM analyses, validating results using displacement, convergence, sensitivity, and analytical tests.

RESEARCH EXPERIENCE

Research Assistant, Experimental Fluid Mechanics and Aerodynamics Laboratory, City College of New York
September 2017 – August 2020

- Performed cross-platform computational fluid analysis by using SolidWorks to model, ANSYS Fluent to mesh, and OpenFOAM to compute, utilizing advantages of each software to speed up the process.

AFFILIATIONS

Creative Director, ASME City College Chapter October 2016 – May 2020

AWARDS

Full Merit Scholarship, CUNY Macaulay Honors College August 2016 – December 2020