Alisa Mizukami

Forest Hills, NY | +1 (347)-361-3434 | alisamizukami@gmail.com
Portfolio: AlisaMizukami.com

EDUCATION

Macaulay Honors College at The City College of New York, New York, NY GPA: 3.68
Bachelor of Engineering, Mechanical Engineering December 2020

SKILLS

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

RELEVANT WORK EXPERIENCE

Intern, **Actasys, Brooklyn, NY** June 2020 - Present
- Testing the performance of synthetic jet actuators to conclude the most effective configuration aligning with client requirements.

Advanced Manufacturing Apprentice, **Zahn Innovation Center, New York, NY** September 2019 – May 2019
- Manufacturing 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.
- Interpreted contours to investigate locations of stress singularities, conclude locations of likely fracture, and summarize results in a presentation to compare against future modal analysis lab tests.

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 Spring 2020
- Working as a team of 6 to design an escape rope that descends a user at a constant speed, regardless of weight.

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.
- Suggested design changes using failure theory, testing improvements using validated FEM model results.

RESEARCH EXPERIENCE

Research Assistant, **Experimental Fluid Mechanics and Aerodynamics Laboratory**, **City College of New York**
September 2017 – Present
- Perform 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 – Present

AWARDS

Full Merit Scholarship, CUNY Macaulay Honors College August 2016 - Present