

Mena Ibrahim

MECHANICAL ENGINEER

Rochester, NY

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Work Experience

L3Harris Technologies

Rochester, NY

ASSOC. MECHANICAL ENGINEER

Feb. 2020 - Present

- Led winning design for the DarkWing Flat Panel VSAT articulation through consolidation of parts, utilizing Autodesk Inventor and ANSYS Mechanical, resulting in a successful bid for a \$2.1 million contract.
- Successfully remodeled and optimized machined components of the Hawkeye 4 Lite VSAT for casting in aluminum, resulting in a 15% reduction in overall cost through cost-effective manufacturing method.
- Designed and built a test fixture to improve system reliability and agility, reducing feedback time and design time by 20%.

21st Century Group

Baltimore, MD

MECHANICAL ENGINEERING CO-OP

Aug. 2017 - Dec. 2017

- Assisted the assembly and installation of a high-speed package sorter (HSPS) in Queens, NY over a 3-month period, resulting in an increase of over 10,000 package capacity monthly.
- Utilized Autodesk Inventor to design and upgrade parts for old high-speed flats feeders (HSFF) in Philadelphia, resulting in a 30% increase in feeder performance.

GE Aviation

Bohemia, NY

MECHANICAL ENGINEERING CO-OP

Aug. 2016 - Dec. 2016

- Built a test fixture to automate switch testing using Arduino and Java, reducing testing time by over 4X.
- Developed a streamlined process for PCB heat management using ANSYS, Excel, and Oracle to reduce PCB prototyping turnover from months to weeks.
- Investigated avionic failures using stress-analysis and FEA techniques and reported results to GE Aviation and customers to salvage a multi million dollar contract.
- Worked on live in-flight diagnostic instrumentation using control system analysis and step responses to predict points of failure and to improve safety for hundreds of end-users.
- Conducted cost-effective experiments with prototypes, documented results and delivered presentations to company peers as well as suppliers and customers.

Rochester Institute of Technology

Rochester, NY

MICROFABRICATION LAB ASSISTANT

Feb. 2015 - Aug. 2015

- Maintained and operated equipment, including cleaning and calibrating as needed.
- Collected and analyzed data using software such as Excel and Matlab.
- Ensured that the lab was clean and organized, and that all materials and equipment were properly stored and labeled.

Skills

Manufacturing	3D Printing, Assembly, Soldering
Engineering	Autodesk Inventor, Solidworks, ANSYS, Matlab
Programming	Node.js, Python, JAVA, LaTeX, VBS
Office	Microsoft Word, PowerPoint, Microsoft Project

Education

RIT (Rochester Institute of Technology)

Rochester, NY

B.S. IN MECHANICAL ENGINEERING

Aug. 2014 - May 2020

NCEES

New York, NY

FE MECHANICAL EXAM - PASS

Dec. 2019