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- EDUCATION** **Virginia Polytechnic and State University, Blacksburg, VA**
- ❖ **Master of Science in Computer Engineering**; Concentration in Machine Learning, *Summa Cum Laude*, December 2024, 4.0 GPA
 - ❖ **Bachelor of Science in Mechanical Engineering**, *Cum Laude*, December 2015
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- EXPERIENCE** **Northrop Grumman Defense Systems, Principal System Engineer**
November 2021, Oklahoma City, Oklahoma
- ❖ Developed unsupervised clustering machine learning model of E-3G maintenance actions.
 - ❖ Developed SVM machine learning model to predict maintenance action.
 - ❖ Designed and developed reliability, availability and maintainability models of E-3 aircraft systems and components.
 - ❖ Designed and developed web and cloud applications to host and display reliability key performance indicators.
 - ❖ Performed FRACAS root causing and data analytics on maintenance actions to drive reliability insights.
 - ❖ Authored major technical deliverables and memos to meet contract requirements and to communicate program outcomes to stakeholders.
- Northrop Grumman Defense Systems, Mechanical Engineer**
December 2018-November 2021, Oklahoma City, Oklahoma
- ❖ Led and developed Function, Failure, Effect, and Cause (FFEC) analysis of over 200 E-3 systems
 - ❖ Led the development of modelling for system/item reliability, availability, and maintainability by leveraging millions of USAF E-3G maintenance actions.
 - ❖ Led NGDS troubleshooting of USAF E-3G defects and assisted with modification installs for the E-3 AWACS.
 - ❖ Led and developed reliability program plan proposal for USAF E-3G systems.
 - ❖ Supported development of automation and tools for E-3 reliability and maintainability, automated production of thousands of documents using VBA and Python.
- Precision Castparts Corporation Manufacturing Engineer**
January 2017-November 2018, Wichita, KS
- ❖ Led assembly staff and machinists to produce various aerospace structural assemblies.
 - ❖ Designed and fabricated tooling to improve throughput for 787, and 737 airframe assemblies.
 - ❖ Planned and executed continuous improvement projects for assembly processes to increase safety and productivity.
 - ❖ Developed automation programs to manage job progress and identify inventory shortages.
 - ❖ Identified and corrected safety issues in assembly cells.
 - ❖ Designed specialty tooling for roller swaging processes.
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- SKILLS** Demonstrated proficiencies with python, machine learning, deep learning, data analytics, and computer vision.
Familiarity with C++, NPSS, MATLAB, ANSYS and LabVIEW
Passionate learner.