

# MICHAEL TRICANOWICZ

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About Me	Senior engineer with expert technical knowledge and extensive project management experience pursuing a new career in data science and analytics. Bringing a proven track record as a detail-oriented problem solver delivering effective results, I am consistently trusted to make judgments that ensure the reliability of highly complex systems and operations. Comfortable interacting with diverse teams to ensure the highest levels of quality and compliance while achieving business goals.
Education	<i>University of North Carolina at Charlotte</i> Master of Science, Data Science & Business Analytics (expected December 2025) <i>Rensselaer Polytechnic Institute</i> Bachelor of Science, Aeronautical and Mechanical Engineering (May 2011)
Skills & Courses	<ul style="list-style-type: none"><li>• Expert knowledge of structural design and repair procedures and classical stress analysis methods.</li><li>• Highly proficient with Excel, Python, SQL, Power BI, and Tableau.</li><li>• Comprehensive knowledge of the CFR. Able to effectively navigate the regulatory system.</li><li>• Relevant coursework: ML, SQL and database systems, information retrieval, visual analytics, business analytics</li></ul>
Projects	Traffic Impact Predictor ( <a href="#">Link</a> ) <ul style="list-style-type: none"><li>• Developed a machine learning model to predict how severe the traffic impact will be due to an accident plus an accompanying app designed to accept a user's location input and generate a prediction. Model development was coded with Python using statistical libraries like pandas, sci-kit learn, and XGBoost.</li></ul> Airline Financial Metrics Comparison ( <a href="#">Link</a> ) <ul style="list-style-type: none"><li>• Developed a dashboard that enables quick and intuitive comparisons of the financial performance of major US commercial airlines by visualizing data sourced or calculated from SEC filings.</li></ul>
Work Experience	<i>American Airlines</i> Senior Engineer (2017 – Present)   Engineer III (2012-2017)   Engineer II (2011-2012) <ul style="list-style-type: none"><li>• Design repairs to address structural damage to the aircraft, develop instructions for troubleshooting, and translate data into instructions for our maintenance team to realize cost savings by avoiding out of service time and part replacements.</li><li>• Act as onsite engineering subject matter expert for aircraft maintenance at vendor facilities across the United States and abroad. Responsibilities include managing and delegating engineering workload among AA and vendor engineers, coordinating engineering responsibilities with other departments, and communicating progress to leadership.</li><li>• Ensure compliance with all applicable government regulations.</li><li>• Develop and deliver presentations for annual supplier business reviews conducted with airline and MRO leadership teams to highlight the data, metrics, and trends affecting engineering support of the operation.</li><li>• Liaise directly with production and quality assurance teams and participate in status meetings to ensure proactive communication with cross-functional leadership.</li><li>• Developed a tool to predict needed engineering headcount based on historical support trends, workload, and locations considering existing headcount and anticipated training and PTO needs.</li><li>• Acts as a group leader by reviewing and approving engineering deliverables and coaching junior engineers.</li><li>• Regularly tasked with acting as Lead Engineer responsible for the supervision and management of a team of 26 engineers supporting 1 international and 6 domestic MRO bases comprising several dozen lines of aircraft maintenance.</li></ul>