Matthew C. Ferguson

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Dear Hiring Manager,

I am excited to apply for the Data Analytics Manager 2 position at Northrop Grumman. I spoke with Darryl Cross today, the position's recruiter, and he informed me that the interview process has already begun. I am hoping that my application is timely, and that I can still be considered for the position. I believe my background alights strongly with the role's requirements.

I am currently a Principal Systems Engineer with Northrop Grumman Defense Systems in Oklahoma City. I have 7 years of work experience in total, 2 years of reliability engineering in aerospace manufacturing with PCC Aerostructures, and 5 years with NG focusing on data analytics for aviation reliability. I am about to complete my M.S. in Computer Engineering shortly, with a concentration in machine learning.

At NGDS, my scope of work is to execute the reliability portion of the E-3 AWACS Performance Based Logistics contract. I am a skilled python developer, and I routinely analyze extensive datasets to enhance aircraft reliability. I have skills, education, and experience in data analytics/modeling, agile frameworks, Python, SQL, Kubernetes as well as web, cloud, and desktop application development. Throughout my professional career and education, I have developed numerous machine learning and deep learning models. My master's thesis is on development of deep learning models to measure the redshift of galaxies.

I have developed and demonstrated leadership skills as a scrum master for the agile development of our customer's Key Performance Indicators. Over the course of a year, I effectively managed a team of junior engineers, guiding them to deliver a value-add product within an agile framework. Our product generated crucial aircraft system, and part performance measures such as mean time to failure, and mean time between maintenance. To complete this effort, we developed a pipeline which would collect and manage government furnished data, preprocess and clean this data, and then transform the data into a product that drove insights by identifying items and systems with low performance. My data analytics initiative transformed vast datasets into actionable insights.

I lead the Failure Reporting and Corrective Action System (FRACAS) for my team. This effort primarily involves data analytics on advanced maintenance actions performed by NGDS field support. I act as a liaison between field support and decision makers by providing data-informed insights on advanced maintenance. I excel at developing data driven visualizations that communicate the need for action to my team and the customer. My FRACAS has submitted over 60 recommended changes to maintenance processes to enhance reliability and maintainability.

I am confident that with my skills and experience and education, I can add value to your team.

Sincerely,

Matt Ferguson