National Aeronautics and Space Administration

Langley Research Center
100 NASA Road
Hampton, VA 23681-2199

To whom it may concern,

I am pleased to provide this letter of recommendation for Nicholas Sarris, who demonstrated an outstanding combination of motivation, skill, and perseverance during his recent internship at NASA Langley Research Center. Nicholas joined our Big Data Analytics and Machine Intelligence Initiative as a summer intern in June 2015, and was assigned to work on a research project involving the application of machine learning techniques to the analysis of test results collected during the Non-Destructive Evaluation (NDE) of carbon fiber material.

Nicholas quickly distinguished himself as a capable and competent beginning programmer when he came on board at NASA. Although we typically identify a basic assignment for interns at the high school level, Nicholas displayed skills and insights that justified his inclusion in a more complex project. Thus, he was given the opportunity to investigate the potential use of Random Forest methods for classifying anomalies in NDE image data. As would be expected, Nicholas was largely unfamiliar with both the fundamentals of materials science, and with this classification method. Both of these topics can be difficult for many undergraduate interns to fully grasp, but even though he is currently at the high school level, Nicholas was able to develop a working understanding of both the science and the machine learning approaches in a remarkably short period of time. As a beginning programmer, Nicholas also needed to rapidly improve his ability to program in Python in order to do well on this project. Again, his accomplishments during the first few weeks of the summer were evidence of his ability to independently acquire new skills in computer science and code development.

Throughout his time as a summer intern at NASA, Nicholas took the initiative to find answers to his questions either by his own research, or by seeking out consultations with more senior members of our team. He possesses excellent technical communication skills for a student at his level, and has an honest, authentic disposition that is a perfect fit for an environment in which professionalism and integrity are required. Working alongside the machine learning experts on our team, Nicholas was able to create a fully-functional proof of concept that demonstrated the potential application of Random Forest classification with NDE image data. His work will contribute to additional research, and he is regarded by all of our staff as a valuable young member of our team. Nicholas' accomplishments in his work at NASA thus far are incredibly impressive, and give every reason to believe that he will succeed in all of his future endeavors.

Sincerely,

Jeremy Yagle
Applied Mathematician
AST, Data Analyst
NASA Langley Research Center