October 24, 2023

**RE: A Letter of Reference for Yash Pansari**

Dear Sir or Madam:

I am pleased to write this letter to discuss Yash Pansari and his work, to support his future endeavors. My name is Giorgio Vallone and I am currently a Research Scientist in the Engineering Division at the Lawrence Berkeley National Laboratory (LBNL). After graduating in Mechanical engineering at the Politecnico of Milano, Italy in 2010, I worked on the development of new solutions for the Structural Health Monitoring of Helicopters. During my studies, I was involved in the European Defence Agency research project ASTYANAX in the role of Technical Manager. In September 2015, I was appointed as a Postdoctoral Fellow in the Superconducting Magnets and Cryostats Group at the European Organization for Nuclear Research (CERN) in Geneva. In those years, I started working on the development of superconducting magnets for the High Luminosity LHC project. In 2018, I successfully competed for a Research Scientist position at LBNL, where I am presently working on the development of particle trackers and superconducting magnets.

I had the pleasure of working with Yash Pansari in 2022, when he became a part of our LBNL team dedicated to the development of superconducting magnets for particle accelerators. Yash collaborated with us for a period of six months before embarking on a different career path. During his tenure with us, Yash was responsible for the development of AI tools tailored for processing images of superconducting strands. This is a complex topic, and we were just starting this project from scratch when Yash joined our team.

In an impressively short span, Yash grasped the essential background knowledge required for this challenging task and independently crafted an image segmentation code able of distinguishing superconducting elements and detecting subtle cracks within them. I was truly astounded by Yash's rapid and substantial contributions to our project during this brief timeframe.

Working alongside Yash was a pleasure; he exhibited a keen receptiveness to feedback, engaging in mature discussions and seamlessly incorporating the outcomes into his work. Yash demonstrates remarkable intelligence, quickly absorbing new concepts and efficiently applying them to his work. His precision and reliability in delivering assignments were consistently noteworthy. His exemplary communication skills enabled him to effectively convey his findings and ideas.

The quality and quantity of his achievements throughout his internship significantly exceeded my initial expectations. Yash proved to be an exceptional student, and I have every confidence in his potential to become a highly accomplished researcher in the future.

In summary, I would like to fully support Yash application. He would be an asset to any research group, and I recommend him for any endeavor he chooses to pursue. Please feel free to contact me if you have any further questions.

Sincerely yours,

Dr. Giorgio Vallone
Lawrence Berkeley National Laboratory