## Dhairvi Shah

Summer Internship Candidate

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Dr. Vishwanath Karad MIT World Peace University, India

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To whom it may concern CERN institute Geneva, Switzerland

Respected Sir/Ma'am:

I am writing to express my interest in applying for the CERN Summer Student Program in 2024. As a Master's student pursuing a degree in Data Science and Analytics at Dr. Vishwanath Karad MIT World Peace University, I am eager to be able to contribute to and learn from the groundbreaking research conducted at CERN.

Accelerating Stroke Prevention is the CERN contribution that initially drew my attention. Strokes and other brain diseases may be detected by the same AI algorithms that are used to identify abnormalities in CERN's accelerator chain. Furthermore, I have always been curious about the mysteries of the universe, and CERN's commitment to pushing the boundaries of particle physics and also using these technologies for betterment of other domains is remarkable. The pioneering work carried out at CERN, especially in Quantum Computing, renewable energy transmission, in health domain as well as preservation of heritage, has inspired me, and I am eager to be a part of a community that is at the forefront of scientific discovery. Also, CERN is a place where people from many countries, faiths, political philosophies, and sexual preferences work together; CERN is one of the few places where everyone's condition are the same regardless of gender, religion, or where they originate from. Your policy of not exploiting research results for military reasons is very reassuring because it ensures safety and demonstrates how ethically oriented work is done at your firm.

To begin sharing details about my academic path, I would want to begin with my competence in Artificial Intelligence, Machine Learning and Deep Learning, Image Processing, Descriptive and Inferential Statistics, Data Analysis and Data Manipulation. Furthermore, I have gained practical experience through my work, such as a research project on predicting an infant's condition after birth using machine learning, Explainability AI implementation for drug discovery, drawing insights on ocean winds from satellite data, Drawing insights from the data in a business module, AI Robot, Image classifications and many other projects, demonstrating my commitment to advancing knowledge in the field. Participating in the CERN Summer Internship is a vital step towards my long-term aim of becoming a great data scientist and broadening my thinking range. The hands-on experience and exposure to cutting-edge research at CERN will not only supplement my academic background, but will also provide essential insights that will influence my future in this sector.

My unique combination of adaptability, critical thinking, emotional intelligence, and collaborative attitude distinguishes me as an important addition of the CERN community. I am convinced that my enthusiasm for discovering new things and improving current ones, as well as my ability to approach problems strategically and ethically, will contribute positively to CERN's collaborative and inventive atmosphere.

In conclusion, I am thrilled at the prospect of contributing to the groundbreaking research at CERN. The opportunity to be part of a community that values collaboration, ethics, and innovation aligns perfectly with my aspirations as a data scientist. I am grateful for your consideration of my application and am eagerly awaiting the possibility to contribute to the important research being undertaken at CERN. Thank you for taking the time to review my application

Sincerely, Dhairvi Shah