

Dear Professors,

I am Prabal Ghosh, and I am deeply committed to advancing research in statistical machine learning, deep learning, and their applications, particularly in the medical domain. I am confident that the EFELIA-3IA Côte d'Azur Excellence Scholarship will enable me to further pursue my academic and research aspirations.

Currently, I am enrolled in the MSc (M2) program in Data Science and Artificial Intelligence at Université Côte d'Azur, specializing in the Medical Track. Last year, during my MSc (M1), I was honored to receive the IDEX scholarship, which greatly contributed to my academic progress. I hold a Bachelor of Technology in Electronics & Communication Engineering from Maulana Abul Kalam Azad University of Technology, India, and a Master of Computer Applications from Amrita Vishwa Vidyapeetham, India. Throughout my academic career, I have focused on key areas such as machine learning, deep learning, and natural language processing, which have shaped my passion for research and innovation in artificial intelligence.

My professional experience further complements my academic background. From April 2022 to March 2023, I worked as a backend web developer at Freshworks, Chennai, India. During this period, I gained invaluable industry experience, particularly in Python Django and Ruby on Rails, where I was responsible for developing scalable web applications that served up to one million users. This experience enhanced my programming skills and taught me how to work efficiently in a high-impact environment.

Moreover, I have been engaged in significant research and development activities that align with the goals of the EFELIA-3IA program. At Prismalia in Sophia Antipolis, I contributed to the development of a chatbot powered by Large Language Models (LLMs) to help companies efficiently retrieve critical information from their documentation. This project, which is integrated into my master's coursework, has allowed me to apply advanced machine learning techniques to real-world problems, enriching my practical expertise in the field.

Additionally, I had the opportunity to complete an internship at INRIA, Sophia Antipolis, from May to August 2024, focusing on Explainable Artificial Intelligence (XAI). My research specifically targeted the elucidation of Convolutional Neural Networks (CNNs), which are pivotal in many AI applications today. This experience reinforced my commitment to exploring the interpretability and transparency of AI models.

My academic work reflects my dedication to research excellence. I have published a Scopus-indexed paper titled "*Mathematical Modeling of Parkinson's Disease Using an Advanced Learning Approach*". These projects highlight my focus on applying AI to medical challenges, an area I intend to continue exploring throughout my MSc and beyond.

Looking ahead, I am deeply committed to pursuing a Ph.D. in machine learning, with the ultimate goal of contributing to academia and advancing research that benefits society. My long-term vision is to apply my knowledge to solve complex problems in the medical domain, where AI has the potential to revolutionize diagnostics and treatment. I am confident that the EFELIA-3IA Côte d'Azur Excellence Scholarship will help me cover my expenses during my studies and reduce the burden of tuition fees, enabling me to focus fully on my studies and research.

In conclusion, I believe that my academic achievements, professional experience, and research background make me a strong candidate for the EFELIA-3IA Côte d'Azur Excellence Scholarship.

Thank you for considering my application. I look forward to the opportunity to contribute to the 3IA Côte d'Azur program and to achieving my academic and research goals.

Sincerely,

Prabal Ghosh

M2 Data Science and AI student

Université Côte d'Azur