Bhavya Pranav Tandra tandra.b@northeastern.edu +1 6179062441 September 2, 2024

Brett IAN (Intelligent Agent Network)

Dear Brett,

I am writing to express my enthusiasm for the AI Engineer Intern position at IAN, as advertised. With a Master's degree in Artificial Intelligence from Northeastern University and extensive experience in data engineering and machine learning, I am excited about the opportunity to contribute to IAN's mission of driving ethical AI innovation.

During my time as a Senior Analyst (Data Engineer) at Capgemini, I architected and implemented data processing pipelines utilizing AWS tools, which included integrating data from multiple sources to create cohesive structures. This experience honed my skills in data preprocessing, model training, and optimization-key responsibilities outlined in your job description. I successfully designed multi-stage data workflows that enhanced data quality and efficiency, aligning perfectly with IAN's focus on developing robust AI systems.

My academic background has equipped me with a strong understanding of machine learning algorithms and AI concepts. Courses such as Deep Learning and Foundations in Artificial Intelligence have provided me with the theoretical knowledge necessary for this role, while my hands-on projects, including the development of a Transformer model for machine translation and a multi-stage image restoration model, demonstrate my ability to apply these concepts in practical settings. These projects not only highlight my programming proficiency in Python and frameworks like TensorFlow and PyTorch but also reflect my commitment to addressing real-world challenges through AI technology.

I am particularly drawn to IAN's emphasis on ethical AI and the integration of multiple AI agents. My personal project on Google's Isolated American Sign Language Recognition involved utilizing various machine learning models to classify sign language gestures, and I conducted extensive research on model performance and bias mitigation strategies. This experience aligns with your requirement for assisting in research on AI biases and developing mitigation strategies.

Moreover, my collaborative experience in fast-paced environments, coupled with my strong communication skills, positions me well to contribute effectively to your engineering team. I am eager to participate in code reviews, contribute to technical documentation, and present my findings, showcasing the impact of my contributions to IAN's projects.

I am excited about the potential to work with IAN's dynamic team and contribute to projects that shape the future of AI. I believe my background in AI and data engineering, combined with my passion for ethical AI, makes me a strong candidate for this internship. I look forward to the opportunity to discuss how I can contribute to IAN's mission.

Thank you for considering my application. I hope to hear from you soon to arrange an interview.

Sincerely, Bhavya Pranav Tandra