# HEMANTO BAIRAGI

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June 9th, 2024

Goldman Sachs

RE: Applied AI Engineer - Engineering - Associate - London

Dear Hiring Manager,

Please accept this letter as an expression of my interest in the Applied AI Engineer - Engineering - Associate - London position. I am a highly motivated and progress-focused Software Engineer with a long-standing background in this industry. Throughout my career, I have shown a track record of initiative and dependability; furthermore, I have devised strategic initiatives that I believe will prove valuable to Goldman Sachs. Throughout my career, I have perfected my skills in designing software applications and algorithm implementation. I am a capable and consistent problem solver skilled at prioritizing and managing projects with proficiency. Furthermore, I have a double honor in both Physics and Astrophysics from the University of Calgary with a background in Software Engineering which satisfies education requirements. Additionally, I have an extensive background in using, but not limited to, C++, C#, JavaScript, Java, Python, HTML, CSS, JavaScript, C, Apache, and Linux in a professional Dev-Ops environment deploying machine learning algorithms on cloud servers, built using agile methodologies in a full-stack process. This background will allow me to create sophisticated data solutions to software problems in a scalable fashion and learn any technologies required at a rapid speed. I believe this background will be valuable to Goldman Sachs, as it demonstrates I excel at creating automated, scalable, and efficient solutions, which I believe will be a valuable addition to Goldman Sachs.

In one of my current roles as an Artificial Intelligence Engineer at ICE Process Management, I develop Artificial Intelligence software tools and products to build out Large Language Models, SQL databases, and Vector databases that allow the creation of custom domain knowledge agents allowing ICE to tackle value-added automation for industries relating to chemical processing and auto plants. The technologies used to create this IP portfolio includes but are not limited to SQL, Python, Natural Language Processing, R.A.G database systems, Large Language Models, Microsoft Co-pilot, Chat GPT, Hugging Face Transformers, FAIIS algorithms, PyTorch, Keras, TensorFlow, FAST API and Qstudio.

In my other role as an AI consultant at Scale AI, I specialize in the development and testing of Foundation Models and Large Language Models. As such, this experience allows me to develop and demonstrate my skills and experience regarding Generative AI and Large Language models. In my previous role, I contributed innovation, problem-solving, and solution deployment toward team efforts and business improvements. I am progressive-minded and in tune with new developments in my field. I have proven to be effective and collaborative, with strong critical thinking talents. This allowed me to create Adamas Audio, a web app that employs Machine Learning to synthesize voices and Latin characters from pictures in a cheap and hyper-efficient manner to produce high-quality audiobooks. The service is currently down due to a lack of profitability. Through the IBM Startup Partnership Program, I gained initial funding to maintain the web service until it became profitable, or for 6 months, whichever came first, starting May 1st, 2023. My hope was to leverage its profitability into a patent this calendar year. Full functionalities are given in this article: https://adamas-audio.medium.com/adamas-audio-machine-learning-and-web-development-to-produce-cheap-audiobooks-and-voice-cloning-a05608e4485f and it was being hosted at https://www.adamasaudio.com/. The latest update consists of software production and integration that can be tracked with this repository: https://github.com/Orko24/FFMPEG_Golang_replacement, and its full code can be displayed in this repository: https://github.com/Orko24/Final-Update-Adamas1.The hope of the update was to increase the scalability and profitability of Adamas Audio, allowing it to be patented sometime this year hopefully.

The gaps in my resume can be explained by two of the following: medical issues among family members and market conditions. I had to put my career on hold temporarily due to having to take care of a family member after they had a heart attack in early 2022. This motivated me to create Adamas Audio to demonstrate I have the software engineering capabilities to excel in this extremely competitive marketplace. Throughout this process of having multiple interviews with Palantir Technologies, MDA, Brainbox AI, and Goldman Sachs and being told my resume would be kept on file, and due to the current state of the economy, they would need more experienced candidates, during the calendar year of 2023. These positions primarily focused on AI and web development using C/C++, Python, Golang, Keras, TensorFlow, PyTorch, and Django. As such, I believe this skill set would be a valuable addition to Goldman Sachs and match the requirements of the Applied AI Engineer - Engineering - Associate - London position as requested.

Thus, I am submitting my candidacy to Goldman Sachs as I believe my talents and experience would add value to the firm; furthermore, I would like to gain further experience in my career in a similar field and gain the experience required to thrive in this field. Please take a moment to review my attached resume and credentials. I would greatly appreciate the opportunity to speak with you regarding my candidacy.

Sincerely,
Hemanto Bairagi