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Nov 3rd , 2023

Hudson River Trading

RE: Algorithm Developer – 2024 Grads

Dear Hiring Manager,

Please accept this letter as an expression of my interest in the Algorithm Developer – 2024 Grads 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 which I believe will prove valuable to Hudson River Trading. Throughout the course of my career, I have perfected designing software applications and algorithm implementation abilities. 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 rapid speed. I believe this background will be valuable to Hudson River Trading, as it demonstrates I excel at creating automated, scalable, and efficient solutions which I believe will be a valuable addition to Hudson River Trading.

In my current role, I contributed innovation, problem-solving, and solutions 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. Currently the web service is down due to post-production maintenance. Through the IBM Startup Partnership Program, I have gained initial funding to maintain the web service until profitable or 6 months whichever comes first, starting May 1st 2023. My hope is 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 is being hosted at <https://www.adamasaudio.com/>. The current update consists of software production and integration that can be tracked with this repository: <https://github.com/Orko24/FFMPEG_Golang_replacement>. This update will allow more scalability and profitability of Adamas Audio, allowing it to hopefully be patented sometime this year.

The gaps in my resume can be explained by 2 of the following, medical issues of 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. The 2023 gap in my resume is due to market conditions, I have had multiple penultimate interviews at Palantir Technologies, MDA, Brainbox AI, and the CSE. Each time, it was indicated due to market conditions and budgetary constraints my resume would be kept on file, as the current state of the economy required a more experienced candidate, even though I had the talent and technical skillset required to thrive in the positions. These positions focused primarily on application and artificial intelligence development using programming languages like C/C++, python, and machine learning libraries like Keras, Tensorflow and Pytorch, as well as web application development frameworks like Django.

Thus, I am submitting my candidacy to Hudson River Trading as I would like to further 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 Yours,

Hemanto Bairagi