ARM-LEG-Simulator Cover Letter

ARM-LEG-Simulator is an open-source software project hosted on GitHub. It is a Pseudo-ARM Assembly Simulator written in Python, providing a platform for coders to test and debug their ARM Assembly code in a simulated environment.

As an experienced Full-Stack Web Developer and AI Solution Specialist, I believe I can bring valuable contributions to the ARM-LEG-Simulator project. One of the key projects I've worked on is the ARM-LEG Simulator project itself, where I wrote a Command Line Interface (CLI) program following modular design Python best practices and Object-Oriented Design principles. This experience has given me a deep understanding of the project's codebase, making me well-suited to contribute in a significant way.

Moreover, I've integrated a test-suite using `pytest` and linting using `ruff` into GitHub Actions for this project, showcasing my proficiency in using these tools. My other professional experiences, such as developing a Generative-AI-assisted RFP evaluation platform at City of Hamilton ITS and a multi-page static website for Starai Tutoring using JavaScript (`React.js`) and `Bulma.css`, have equipped me with a broad skillset in software development.

In addition to my technical skills, my self-learning journey has equipped me with a solid foundation in Machine Learning and Deep Learning. I've completed the Machine Learning Specialization from Stanford Online + Coursera and the Deep Learning Specialization from Coursera. These courses have given me a deep understanding of Supervised Machine Learning, Advanced Learning Algorithms, Unsupervised Learning, Recommenders, Reinforcement Learning, Neural Networks, and Deep Learning. These skills can be particularly useful in optimizing the simulator's performance and adding new features.

I'm excited about the opportunity to contribute to ARM-LEG-Simulator and look forward to potentially bringing my skills and experiences to your team. Thank you for considering my application.

Best regards, Arjun Sarao