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CYSE368

Reflection #1

First 50 Hours Cybersecurity Internship Reflection

During the first 50 hours of my internship at CAE in Cybersecurity Community, contracting for Augusta University, I was introduced to an exciting project with the goal of integrating artificial intelligence with cybersecurity. Our team of five interns learned that our work is a subset of the NSA's initiatives, adding to the layer of significance to our work.

Our primary objective is to develop a large language model (LLM) that enhances cybersecurity systems while reducing dependency on cloud-based AI models like Google Gemini. Instead, we are working with Ollama, an AI model that can run locally, improving security by eliminating the reliance on HTTPS. The first phase of our work involved installing Ollama on our devices and exploring its capabilities by testing different models available for download.

We were given access to the GitHub repository from the previous cohort of interns (Cohort 5). Their project focused on building a database capable of parsing questions from PDF's using Google Gemini. Our task now is to adapt and enhance their work to integrate Ollama instead. With a large amount of existing code, our current focus is on understanding the structure, functionality, and dependencies within the project. Running and troubleshooting the inherited code is a critical first step before we can begin making modifications.

So far, this experience has been an interesting one to say the least. I currently have great knowledge in cybersecurity, but working with AI implementation is something I've never done,

and it's further expanded my knowledge. It has made me realize though, I need to improve in my software development skills. I was never a strong programmer, and I want to use this opportunity to refine those capabilities. Moving forward, I look forward to working with Ollama and contributing to a system that strengthens cybersecurity operations.