F26.06 A Generative AI Assistant for Open Source Software Development

Overview
This project involves developing a Generative AI conversational assistant that supports software developers interested in contributing to open-source projects. Leveraging advanced Retrieval-Augmented Generation (RAG) techniques, the assistant will answer developers' queries by mining relevant information directly from software repositories (e.g., GitHub) and project documentation. The goal is to simplify the onboarding process for new contributors, enabling easier access to critical information such as code structure, documentation details, and development workflows. Ultimately, this AI-based tool aims to promote greater participation and inclusion within open-source communities.

What the student will DO and LEARN
The intern will contribute actively to creating the AI-driven conversational assistant, specifically engaging in tasks such as building tools to collect data from software repositories, developing the AI system, and designing user-friendly conversational interfaces and communication plugins. Additionally, the student will help conduct experiments to evaluate the assistant's effectiveness. Through this experience, the student will learn essential skills in artificial intelligence (particularly Generative AI and Retrieval-Augmented Generation), software engineering, and user-interface design. The internship offers practical, hands-on learning of cutting-edge technologies, research methodologies, and teamwork.

Additional benefits
Social networking

Additional qualifications
N/A

Time commitment
6 hrs/week for 30 weeks