

OBJETIVOS	Investigar aplicações selecionadas de Large Language Models (LLMs).
EMENTA	Introduction; AI Agents; Selected Data Access Applications; Selected SW Engineering Applications; Selected Medical Applications.
PROGRAMA	1. Introduction. a. Introduction to LLMs. b. Introduction to Prompt Engineering. 2. AI Agents. a. AI Agent Frameworks: i. LangGraph and Deep Agents. ii. Pydantic AI. iii. HuggingFace Smolagents. iv. OpenAI SDK. v. Google ADK. b. Agent Communication Protocols: i. Model Context Protocol (MCP). ii. Agent2Agent Protocol (A2A). 3. Selected Data Access Applications. a. Retrieval Augmented Generation (RAG). b. Attributed Question Answering. c. Natural Language Database Interfaces: i. Text-to-SQL. ii. Conversational Text-to-SQL. 4. Selected SW Engineering Applications. a. Selected Code Assistant Tools: i. OpenAI Codex. ii. Anthropic Claude Code. iii. Gemini Code Assist. iv. GitHub Copilot. b. Sequential Function Chart Generation. c. LLMs and Formal Software Engineering. 5. Selected Medical Applications. a. Medical Information Retrieval In Natural Language using LLMs. b. Information Extraction (IE) and Named Entity Recognition for the medical domain. c. Healthcare Data Integration - HL7 FHIR and LLMs.

AVALIAÇÃO	O desempenho do aluno será avaliado por seminários apresentados em sala, nos temas listados no programa da disciplina.
BIBLIOGRAFIA PRINCIPAL	(Artigos selecionados)
BIBLIOGRAFIA COMPLEMENTAR	(Artigos selecionados)