MAJOR IN COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING CONCENTRATION

Artificial intelligence (AI) and machine learning (ML) are about creating intelligent systems – systems that perceive and respond to the world around them. AI and ML systems are everywhere, in our cars and smartphones, and businesses of all sizes are investing in these areas.

The AI/ML concentration combines a rigorous computer science degree with coursework in AI, ML, and big data. This concentration also provides students the necessary foundational coursework and skills in math, statistics, and data science.

Learning Objectives

Upon successfully completing this program, students will be able to:

1. Develop AI and ML approaches for complex real-world problems.
2. Deploy high-performance computing tools for the analysis of large datasets.
3. Use a broad range of AI and ML tools, techniques, and algorithms.
4. Apply AI and ML tools in an ethical and socially responsible manner, with an awareness of biases that can result from their indiscriminate use.
5. Communicate results of complex analyses verbally and in writing using appropriate visualization techniques.
6. Confidently pursue graduate studies or professional employment in AI/ML and computer science.

Potential Occupations

In addition to the career opportunities open to all computer science graduates, the AI/ML concentration opens career paths that include:

Machine learning engineer, data scientist, business intelligence developer, big data engineer, data mining analyst, natural language processing analyst, computer vision engineer.