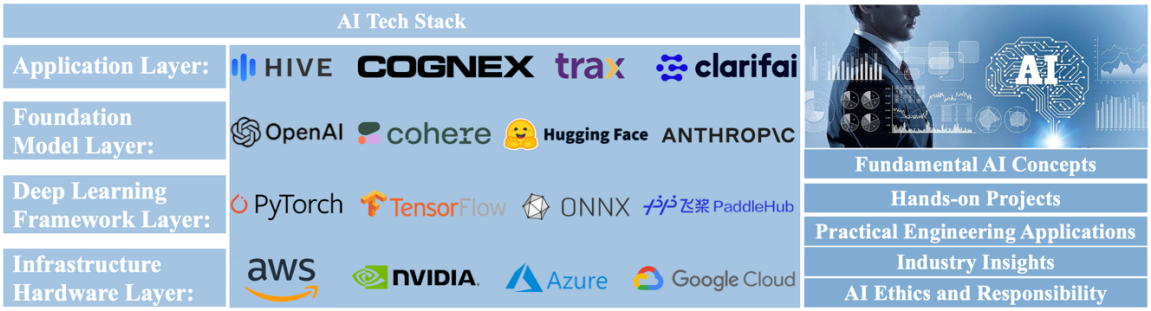
New Course
Opening Fall 2024

SAN FRANCISCO STATE UNIVERSITY

ENGR 413 Artificial Intelligence in Engineering



Artificial intelligence (AI) is ubiquitous in our daily lives: wearable devices, smartphones, self-driving cars, recommendation systems, financial analysis, and even medical systems in hospitals. AI engineering is an emergent field focused on developing tools, systems, and processes that facilitate the practical application of AI in real-world scenarios. Whether you aspire to be at the forefront of AI development or to enhance your engineering expertise with AI skills, this course will provide you with the knowledge and practical experience needed to excel in the rapidly evolving tech landscape.

This course delves into:

- **Fundamental AI Concepts:** Gain a solid understanding of machine learning, neural networks, natural language processing, and computer vision.
- **Hands-on Projects:** Engage in real-world projects and case studies, applying AI techniques to solve complex engineering problems.
- **Practical Engineering Applications:** Discover how AI is revolutionizing fields such as robotics, at-home health monitoring, and sustainable energy solutions.
- **Industry Insights:** Learn from guest lectures by leading AI experts or engineers and explore the latest trends and innovations shaping the future of the industry.
- **Ethics and Responsibility:** Discuss the ethical implications and societal impacts of AI technologies in engineering, fostering a responsible approach to innovation.

ENGR 413 will apply towards **3 units** for the following programs:

- Require for Upper-Division for BS-CompE.
- Elective for MS-ECE.
- Elective Upper Division Course for BS-EE
- SF State Scholars in EE, and CompE

Prerequisite SFSU Courses or Background:

- **Python Programing (ENGR 221)**
- **Linear Algebra (ENGR 245)**
- **Probability and Statistics (ENGR 281)**
- **Contact Dr. Qin if have equivalent background**

Class Time:
M/W 9:30am-10:45am

Contact:
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