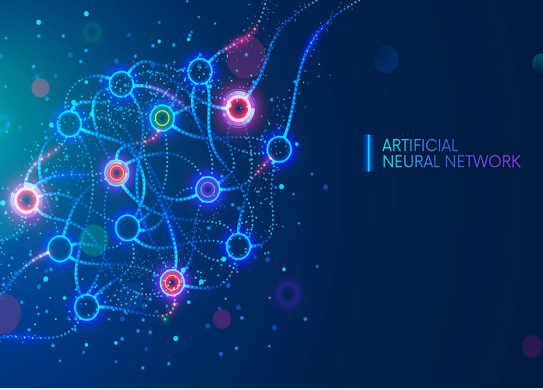




Artificial Intelligence

ACCA7026

Dr. Seena Joseph

ACCA7026

- Lecturer: Dr. Seena Joseph
- Email : Seena.joseph@uwtsd.ac.uk
- Current Timetable

Thursday : 11H00 to 13H00 at IQ110

Thursday : 16H00 to 16H00 at IQ112

Module content

- Strong and Weak AI [Lecture 1 and 2]
 - Definition of AI
 - Strong and Weak AI
 - Historical contexts and Developments
- Ethics and Risks of developing AI [Lecture 3]
 - Ethical consideration in AI development
 - Risks and challenges of AI development
 - Case studies and current debate
- Agent based learning [Lecture 4]
 - AI agent, learning and Environment
 - Case study
- Search Algorithms [Lecture 5, 6, and 7]
 - Informed and uninformed search
 - Global and Local search
 - Optimisation and constraints
- Population based search [Lecture 8 and 9]
 - Genetic algorithms

Module Content

- Natural Language processing [Lecture 10, 11 and 12]
 - Introduction to NLP
 - Text representation
 - NLP models
- Introduction to Machine Learning [Lecture 13, 14, and 15]
 - Supervised and unsupervised methods
 - ML algorithms
- Introduction to Deep Learning [Lecture 16 and 17]
 - Deep learning
 - CNN
- Reinforcement learning [Lecture 18 and 19]
- Revision [Lecture 20]

Lecture Schedule

Date	Content
Week of Sep 30th	• Introduction to AI [Lecture 1] • Strong and Weak AI [Lecture 2]
Week of Oct 7th	• Ethics and Risks of developing AI [Lecture 3] • Agent based learning [Lecture 4]
Week of Oct 14th	• Search Algorithms [Lecture 5 and 6]
Week of Oct 21st	• Search algorithms cont. [Lecture 7] • Genetics Algorithms [Lecture 8]
Week of Oct 28th	• Genetics Algorithms cont. [Lecture 9] • Introduction to NLP [Lecture 10]
Week of Nov 4th	• Reading Week
Week of Nov 11th	• NLP Cont. [Lecture 11, 12]
Week of Nov 18th	• Introduction to Machine learning [Lecture 13, 14]
Week of Nov 25th	• Machine Learning Cont. [Lecture 15] • Introduction to Deep learning [Lecture 16]
Week of Dec 2nd	• CNN [Lecture 17] • Reinforcement Learning [Lecture 18]
Week of Dec 9th	• Reinforcement Learning cont. [Lecture 19] • Revision [Lecture 20]

Assessment Schedule

Assessment	Date
Assignment	Week of Dec 9 th 2024
Exam	Week of Jan 6 th , 2025