

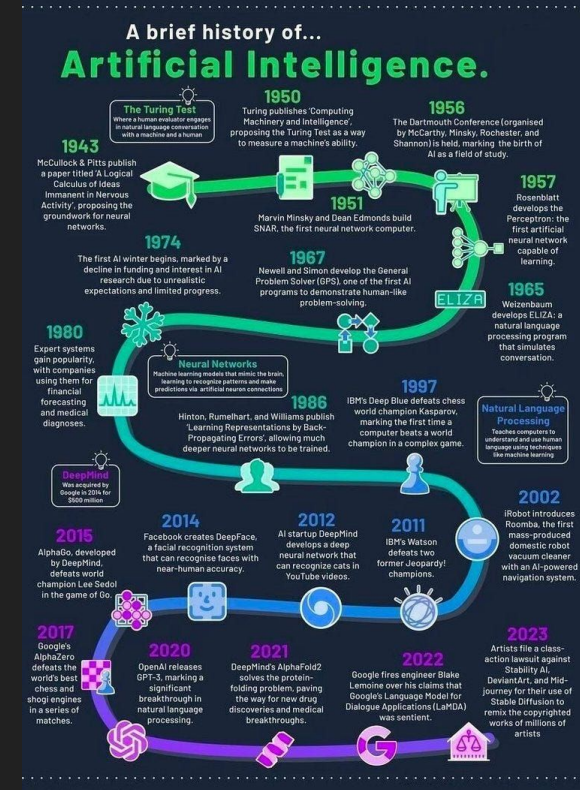


AI Internship Journey

Aaryan Samanta

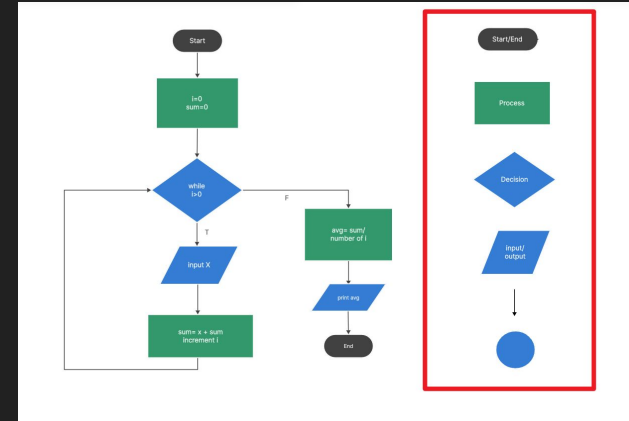
Introduction to AI

- In this module, I learned the basics of AI
 - History and evolution of AI
 - AI vs. traditional programming
 - Ethical considerations and societal impact
- Methods
 - Explored real-world examples of AI applications
 - Reflected on AI's effect on jobs and industries



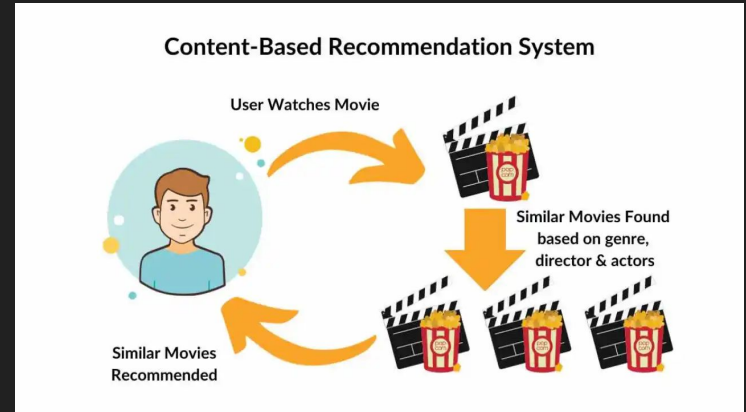
Computer Science Fundamentals

- Explored the foundations of computer science and learned the basics of coding for AI
 - Writing pseudocode and understanding algorithms
 - Basics of Python: loops and conditionals
 - How processes can be expressed as logical steps
- **Methods**
 - Python programming Exercises
 - Pseudocode practice



Artificial Intelligence

- Learned how AI models work, including machine learning and basic prediction systems.
 - Machine learning algorithms and classification
 - Building recommendation systems
 - Understanding how AI makes predictions
- **Methods**
 - Python for model building
 - Prediction games and simple AI models



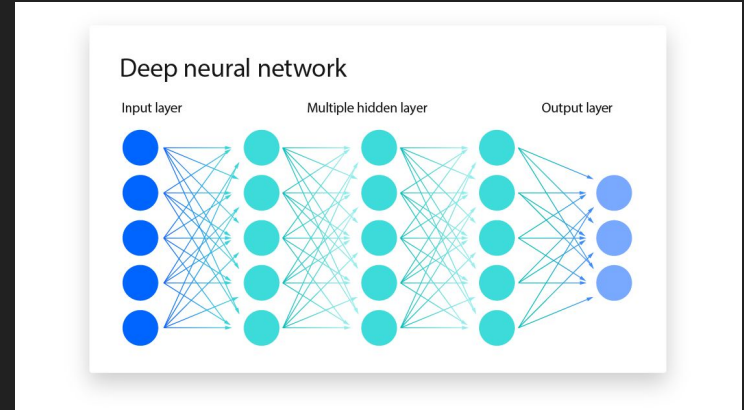
Natural Language Processing (NLP)

- NLP enables computers to understand human language
 - Common uses: translation, grammar checking, and content moderation
 - Challenges like slang and multiple languages
- Methods
 - Wrote assignment about it



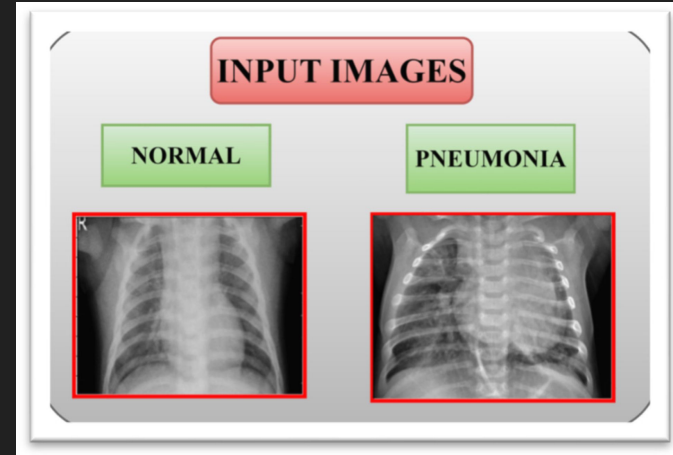
Deep Learning & Neural Networks

- Neural Networks related to human brain structure
 - Deep learning uses multiple layers for complex tasks like image recognition
 - Real-life applications include self-driving cars
- Methods
 - Built a digit classifier using Python and Keras and MNIST data set



Pneumonia Detection with Chest X-Ray Images

- Created an AI model that detects pneumonia in chest X-rays
 - Learned how AI can detect pneumonia
 - Used Deep Learning Network
 - Updated through training testing and refinements
- Methods
 - Used Python with TensorFlow/Keras
 - Applied convolutional neural networks (CNNs)Processed Medical imaging datasets for training and testing



Conclusion

- What I Enjoyed Most
 - Building real AI projects like the pneumonia detection model
- What Challenged Me Most
 - Understanding complex neural network concepts
- Most Proud Of
 - Successfully training and evaluating a CNN for medical image classification
- Future Use of Skills
 - Apply AI and ML techniques to future research and real-world problem solving



- Topic summary
- Key concepts you learned
- Tools or methods you used (e.g., Pandas, Keras, Scikit-learn)
- Mini example or insight (a fact, skill, or moment that stood out)