

NAME :ONYEKWERE MARY

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COURSE CODE :COM 423

COURSE TITLE:EXPERT SYSTEM AND MACHINE LEARNING

LEVEL :HND2

ASSIGNMENT ON COM 422

The three(3) AI area are;(Neural networks, Navigation,and Virtual Reality).

1:NEURAL NETWORK.

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to interpret and understand the visual world. It involves algorithms and models designed to identify and categorize images, based on patterns and objects within them.examples , Identifying objects, faces, or scenes in images.Google Photos uses neural networks for facial recognition, object detection, and scene understanding in images.

Website: photos.google.com.

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that gives computers the ability to interpret, manipulate, and comprehend human language. Example, language translation, sentiment analysis, chatbots.

Website: [openai](https://openai.com).

Website: [Google Translate](https://www.google.com/translate).

- data and conditions to shape strategic decisions and policy. JPMorgan's LOXM JPMorgan uses neural networks in their LOXM (Liquid Oxen) system for stock trading and market predictions.

Website: jpmorgan.com

- the human driver in navigating a vehicle from an origin to a destination while avoiding road hazards and responding to traffic conditions. Enabling self-driving cars to understand and navigate the environment. Tesla's Autopilot system uses neural networks for object detection, lane keeping, and navigation in self-driving cars.

Website: tesla.com/autopilot.

- images and data. IBM Watson Health employs neural networks to analyze medical images and assist in disease diagnosis.

Website: ibm.com/watson-health.

2 NAVIGATION

- cleaners use navigation algorithms to map and clean homes efficiently, avoiding obstacles and returning to charging stations.

Website: irobot.com

- running and cycling activities. It provides detailed maps of routes, performance analytics, and social features to connect with other

athletes and share achievements.

Website: Strava

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ensure safe and efficient marine travel.

Website: Raymarine

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critical flight information, ensuring safe and efficient air travel.

Website: Honeywell Aerospace

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such as harvesting, applying pesticides, weeding, and other tasks .example Blue River Technology develops autonomous agricultural robots that navigate fields to perform tasks like precision weeding and crop spraying.

Website: bluerivertechnology.com

3 VIRTUAL REALITY

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made—improvements that are attached or have been added.Virtual reality enables potential buyers to take virtual tours of properties without physically visiting them.

Website: Matterport

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from across the world without ever having to leave the classroom. Virtual Reality provides immersive educational experiences, enabling students to explore historical sites, conduct virtual lab experiments, and visualize complex concepts in a 3D environment, enhancing their learning and retention. It is also used for training in various fields, including medical surgery simulations, military exercises, and flight simulations.

Website: zSpace

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different physical locations to use their mobile or internet connected devices to meet in the same virtual room. Virtual Reality facilitates virtual meetings and collaboration, providing a sense of presence and interaction for remote teams.

Website: Spatial

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experiences by placing them directly inside the game world. This heightened sense of presence enhances gameplay, making it more engaging and interactive.

Website: Oculus

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professionals by simulating complex surgeries and procedures in a risk-free environment. It allows for practice and improvement of skills without the need for live patients.

Website: Osso VR

