INTRODUCTION TO INTELLIGENT USER INTERFACE

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INTELLIGENT USER INTERFACE

- AI + HCI
- INTERFACE THAT UNDERSTANDS US
- BELIEVE INTERACTION
- APPLYING STANDARD AI TECHNIQUES TO INTERFACE OR INTERACTION DESIGN

ARTIFICIAL INTELLIGENCE - HISTORY

- Formal Reasoning
- Computer Science and Programming
- Turing Test
- Game AI
- Neural Network
- Symbolism
- 1956 workshop at Dartmouth College

ARTIFICIAL INTELLIGENCE

- Knowledge Representation
- Formal Reasoning
- Search Algorithms and Optimization
- Planning
- Machine Learning
- Game
HUMAN COMPUTER INTERACTION

- HUMAN
- INTERFACE
- TECHNOLOGY
- TIME-HUMAN-MACHINE
- COMPUTING
- INTERACTIONS
- SOFTWARE ENGINEERING AND I-CM
- OTHERS
  - CONFIGURATION
  - SHADES

IUI EXAMPLES

CONTENT PREDICTION

GAZE CONTROLLED FLIGHT SIMULATOR

Gaze Controlled Flight Simulator
MULTIMODAL DRONE

OPERATING SMALL AND LARGE SCREEN DISPLAYS

ASSISTIVE TECHNOLOGY

COURSE STRUCTURE

- Course
- Course/work plan
- Value and good practice
- Information/Remote
- Target Impact
- Course Assessment
- Learning and support plan
- Module/Unit guide
- Course Guide
- Course Evaluation
COURSE STRUCTURE – ASSIGNMENTS

- Assignment 1 – CLIPS based project on Expert System
- Assignment 2 – Neural Network based NLP project
- Assignment 3 – Multimodal System

COURSE STRUCTURE – PROJECTS

- Can take forward any one of the assignments
- Can be worked as a group of 2 or 3 students
- Each group should have at least one student who has registered for the course
- A working prototype should be evaluated

EVALUATION AND GRADING

- 30% on Assignments
- 30% on Examinations
- 40% on Project

PUBLICATION

- ACM SIG conference
- ACM Transactions on Interactive Intelligent Systems
- Any journal or conference on either NLP or AI
TAKE AWAY POINTS

- Ax of E3
- Line of E3
- Course structure
- Outcome of the course