iCognium Neuroverse

Artificial Intelligence Training

(This Course Addresses <u>Artificial Intelligence Training;</u> 1st known practical <u>Neural Network Course</u> with an Introduction to Artificial General Intelligence.

Course Description

Targeting computer users who aren't programmers, this course engages participants in critically reflective and thoughtful analysis and practical application of the technologies that drive Artificial Intelligence (AI). The course attends to understanding AI, Machine Learning and Deep Learning as well as application of said tech stack, by understanding and applying best-practice guidelines. The course is designed for students to appreciate the application of artificial intelligence and data science fundamentals to solve real world problems. The topics covered in this course will enable students to solve resource allocation, decision making and related problems that professionals in any industry are likely to encounter.

Through individual and small group explorations, course participants will critically examine the various levels of AI technology and the technical toolsets that are being used. From a more practical standpoint, the course is delivered in a manner that is experiential and transformational in order to connect to users on a practical level that will allow them to relate the theoretical guidelines and proposed best-practices to the context/situation in which he/she serves (or will serve) as a professional.

This course uniquely introduces Students to a mode of Ai called Artificial General Intelligence that is expected to emerge by 2029, by Google's Ray Kurzweil et al., as well as outlines its likely impact on the workforce.

Fun fact[1]: This is the 1st known practical Neural Network Course with an Introduction to Artificial General Intelligence.

<u>Fun fact[2]</u>: This originally stemmed from an initiative to develop world's 1st university, just for Artificial Intelligence. (See local newspaper articles by iCognium Ai Course Author, in 2018 and 2019)

Smart Course Modules for Non Programmers (Pathways)

Professional (access to self driving	Design Build your own full scale car!
car)	
Prep-Module #1: Develop Python Programming	Prep-Modules: iCognium Deep Learning
Skills. (Installing Python, Numbers, Strings,	Specialization
Slicing Up Strings, Lists, ifelse, for, Range,	Module #1: 3d model design guide.
comments, Continue etc, variable scope etc) (5	Module #2: Buck creation (for translation of 3d to
hours)	real).
Prep-Module #1: Develop numpy Programming	Module #3: Real life car body creation based on
[Arrays, Array indexing, Datatypes, Array math,	buck data.
Broadcasting] (1 hour)	Module #4: Real life chassis creation using modular
Prep-Module #3: Do Python Pickle/data	approach (suspension, power, etc)
wrangling [When not to use pickle, Pickling files,	Module #5: Self driving integration
Unpickling files, Compressing pickle files] (40	
minutes)	
Prep-Module #4: Perform Github Setup	
(Universal Code organization - A social hub for	
source code sharing and viewing) (1 hour)	
Module #1: Develop Fundamental Artificial	
Neural Networks. (ANNs power most smart apps	
today, and they are <u>Universal Function</u>	
Approximators)	
Module #2: Do Machine Learning Library	
Practice. Use powerful machine learning libraries	
like Tensorflow, Mxnet to solve problems.	
Module #3: Practical Convolutional Artificial	
Neural Network application (Seen in real world in	
Self driving cars, Disease Diagnosis engines etc)	
Module #4: Practical Recurrent Artificial Neural	
Network application (Seen in real world in any	
voice recognition App)	

Module #5: Practical Generative Adversarial	
Network application (Seen in real world in	
synthetic Avatar Apps)	
Module #6: Practical Reinforcement Learning	
application (Seen in real world in Electricity	
Consumption optimization)	
Module #7: Learn iCognium "RED"	
Methodology: Rapid Experimentation Delivery of	
Ai apps, i.e. key steps for agile/machine	
learning/Ai deployment.	
Module #8: Introduction to Artificial General	
Intelligence (Predicted as mankind's last invention	
around 2029, by Prof Ben Gortzel, Dr Eray	
Ozkural etc) write a deep learning research paper	
Module 1 to 8 (about 6 weeks)	
Fourth Semester Project/Assessment: Build a	
Deep Learning/Ai product. (See Rubric:	
Rubric_iCognium Practical Ai Examination)	
Duration: 6 Weeks	Duration: 2+ months
COST. 25 LISD	COST. 7000 LISD
COST: 35 USD	COST: 7000 USD