UT DALLAS
Erik Jonsson School of Engineering and Computer Science

Department of COMPUTER SCIENCE
THE UNIVERSITY OF TEXAS AT DALLAS

invites you to attend

Artificial Intelligence Conference

Saturday May 19, 2018 @ SLC building, UT Dallas

8-8:30am	Registration & Breakfast
8:30-12	AI/Machine Learning Workshops
12-12:30	Registration & Lunch & Networking
12:30-5:30	Technical Talks by Several Prominent Speakers in industry and academia
5:30-6pm	Networking with speakers & industry folks

Details: aisutd.org/conf

Register by May 15: bit.ly/csconfutd

($25 late fee starts on May 16)

Registration Fee	*Workshops*	*Technical Talks*	*Whole Day*
Professionals	$60	$60	$100

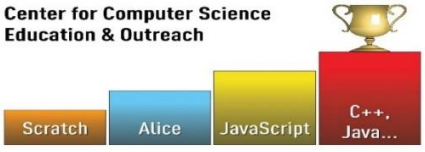
College students, faculty & staff: $10

Advanced high school students (with registered adult): $25

Questions? contact@aisutd.org

Artificial Intelligence Society

Center for Computer Science Education & Outreach



Tentative Agenda for Artificial Intelligence Conference

Saturday, May 19, 2018 @ UT Dallas

Hands-on Workshops

Time	Description
8am - 8:30	*Registration & Breakfast (Foyer area)*
8:30-9:30 9:40-10:40 10:50-12	*Track #1:* Three one-hour workshops by AIS – SLC 1.102 Intro to Natural Language Processing: Sentiment Analysis of Reviews - Amol Mavuduru Training Neural Nets with Microsoft Azure - John Laroche Introduction to Deep Learning for Computer Vision - Ram Narayan Lakshmanan
8:30 – 12	*Track #2:* Data Science Visualization Techniques – Tarry Singh – SLC 2.203

Technical Talks (SLC 1.102)

Time	Description
12 - 12:30	Registration & Lunch & Networking
12:30 - 12:45	Welcome by Dr. Gopal Gupta, CS Department head
12:45 - 1:30	Deep Learning for the masses, Tarry Singh, deepkapha.ai
1:30 - 2:15	Babar Bhatti, Quantum Grid Labs
2:15 - 3	Automating Disease Management Using Answer Set Programming: Heart Failure, Dr. Zhou Chen, UT Dallas
3 – 3:15	*Tea Break & Networking*
3:15 - 4	Scaling Deep Learning AI beyond experimentation to deployment at scale, Mandeep Kumar, deepcognition.ai
4 – 4:45	AI in 3D Seismic Interpretation, Vikram Jayaram, Pioneer Natural Resources Company
4:45 – 5:30	AI in NLP & notes from *Train AI conference @ SFO*, Dr. Karen Mazdi, UT Dallas
5:30 – 6pm	*Snacks & Networking*

Description of Workshops & Speaker Information

Workshop #1: Three one-hour workshops by AI Society, UT Dallas – SLC 1.102

8:30 - 9:30 am: Intro to Natural Language Processing: Sentiment Analysis of Reviews - Amol Mavuduru
9:40 - 10:40 am: Training Neural Nets with Microsoft Azure - John Laroche
10:50 – 12 noon: Intro to Deep Learning for Computer Vision - Ram Narayan Lakshmanan

Workshop #2: Data Science Visualization Techniques – SLC 2.302
Presenter: Tarry Singh, founder & AI Neuroscience Researcher @ deepkapha.ai linkedin.com/in/tarrysingh He is also a mentor for Deep Learning course @ Coursera & his book "Deep Learning / AI Projects" is expected to come out in September 2018!

Data science skills are in great demand and data visualization is the best way for an aspiring data scientist to enter deep learning profession. In this workshop we will quickly cover Numpy — a fundamental package for scientific computing, and Pandas — we will learn about Series and Frames and do a fast analysis of our data and do the major part of our workshop learning about various data visualization told such as Matplotlib, Seaborn and more tools.

Requirements: Laptop with pre-installed software – we will email the requirements to all the participants.

Description of Tech-Talks & Speaker Information

Deep Learning for the masses @ 12:45pm
Presenter: Tarry Singh, founder & AI Neuroscience Researcher @ deepkapha.ai linkedin.com/in/tarrysingh

Deep Learning is a fast emerging field and is the electricity that will light up the era Artificial Intelligence. In this talk, we will visit the history of deep learning, discuss popular techniques such as CNN briefly and conclude with how you can become an experienced Data Scientist rapidly.

Babar Bhatti, Quantum Grid Labs @ 1:30pm
Presenter: Babar Bhatti, Principal @ Quantum Grid Labs, Co-founder for Dallas AI meetup linkedin.com/in/bbhatti

Automating Disease Management Using Answer Set Programming: Heart Failure @ @ 2:15pm
Presenter: Dr. Zhou Chen, UT Dallas www.hlt.utdallas.edu/~yzcchen

Management of chronic diseases such as heart failure (HF), diabetes and chronic obstructive pulmonary disease is a major health care problem. A standard approach that the medical community has devised to manage widely prevalent chronic diseases such as heart failure is to have a committee of experts develop guidelines that all physicians should follow. These guidelines typically consist of a series of complex rules that make recommendations based on

a patient's information. We describe a physician advisory system that codes the entire set of clinical practice guidelines for heart failure management using answer set programming (ASP). Given a patient's medical information, the system generates a set of guideline-compliant recommendations just as a human physician would. The system works even in the presence of incomplete information.

Scaling Deep Learning AI beyond experimentation to deployment at scale @ 3:15pm
Presenter: Mandeep Kumar, CEO & co-founder, deepcognition.ai, linkedin.com/in/mandeep1

This presentation will discuss various barriers that currently exist for businesses to practically design and deploy AI at scale. It will also showcase how Deep Cognition's free AI platform is reducing time of development and deployment of Deep Learning models in businesses.

AI in 3D Seismic Interpretation @ 4pm
Presenter: Vikram Jayaram, Staff Scientist (AI/ML Engineering), Pioneer Natural Resources Company
linkedin.com/in/vjayaram

We are painfully aware of the challenges and complexity of performing seismic interpretation and reservoir characterization in increasingly larger, more intricate, and more heterogeneous data sets. This increase in size is coupled with an emphasis on more quantitative methods in frontier exploration and mature basins. Unconventional reservoirs present an even higher level of challenges and opportunities due to the large number of wells available in resource plays. Continuous advances in the areas of pattern recognition and machine learning such as big data analytics, semi-supervised learning, functional data analysis, regression techniques, multidimensional scaling, kernel- and nonlinear principal component analysis, latent-space analysis, and other pattern recognition and machine learning tools provide means to handle these challenges. We plan to demonstrate some of the most visible developments in recent years that seek the utilization of pattern recognition methodologies and statistical models to aid interpretation. This talk will address the theory, assumptions, and application of robust algorithms that can partially automate the interpretation and characterization of geologic, geophysical, petrophysical, and engineering data within an integrated stratigraphic framework.

AI in NLP & notes from Train AI conference @ SFO @ 4:45pm
Presenter: Dr. Karen Mazdi, CS faculty, UT Dallas utdallas.edu/~kjm160430

Dr. Karen Mazdi will talk about the algorithms for advancing the state of the art of Natural Language Generation and Natural Language Understanding. Discovering techniques that move us closer to AI approximations of how humans produce and understand language is the most exciting challenge facing AI researchers. Dr. Mazdi will specifically focus on techniques that can be applied to educational technology.

She is attending "Train AI conference" on May 9&10 in San Francisco, which features speakers like Chess Champion Garry Kasparov & leading technologists from Silicon Valley companies like Tesla, Apple & Google and several start-ups. She will share her experiences & observations with us!