

# Department of COMPUTER SCIENCE THE UNIVERSITY OF TEXAS AT DALLAS

invites you to attend

# Artificial Intelligence Conference

Saturday May 13, 2017 @ UT Dallas

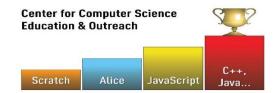
8-8:30am	Registration & Breakfast - ECSS 2.102 Foyer
8:30-11:30	Artificial Intelligence Workshops - ECSS 2.102
11:30-12:15	Registration & Lunch & Networking - ECSS 2.102
12:15-6	Technical Talks by several prominent speakers in industry and academia - ECSS 2.102
6-6:30pm	Networking with speakers & industry folks

Details: aisutd.org/conf Registration: bit.ly/cs-conf-utd

Registration fee	Workshops	Technical Talks	Whole day
Guests	\$50	\$60	\$100
UTD folks	\$5	\$5	\$10

## Questions? contact@aisutd.org





# Agenda

## Artificial Intelligence Conference Saturday May 13, 2017

### **Workshops - ECSS 2.102 (TI Auditorium)**

Time	Description
8:00-8:30	Registration & Breakfast (Foyer area)
8:30-10:00	Evolutionary Robotics – Jay Butera, AIS Technical Lead
10:00-10:15	Coffee Break & Networking (Foyer area)
10:15-11:30	Sequence to Sequence Learning in Natural Language Processing – Winston Carlile, AIS Technical Lead

## **Technical Lectures - ECSS 2.102 (TI Auditorium)**

Time	Description
11:30-12:15	Registration & Lunch (Foyer area)
12:15-1:15	Augmented Intelligence on the Cloud: IBM Watson and Quantum – Romelia Flores, Distinguished Engineer, IBM
1:15-1:45	Future of AI in Education – Vijay Reddy, GeoSpell Academy
1:45-2:45	AI in Games: It's Probably Not What You Think – Dave Mark, Intrinsic Algorithm LLC
2:45-3:00	Tea Break & Networking (Foyer area)
3:00-3:30	Uphill Battles in Natural Language Processing – Vincent Ng, UT Dallas CS Faculty
3:30-4:30	Machine Learning at Google – Jamie Erbes, CTO, Google Cloud
4:30-5:00	Artificial Intelligence: The Next Frontier for High Performance Computing - Bob Crovella, NVIDIA
5:00-5:30	Machine Learning to Augment Human Analysis - Ken Koo, CEO, Bridge Alliance
5:30-6:00	Minds, Machines, and Morality: Ethical Realms of Artificial Intelligence – Chris Davis, UT Dallas CS Faculty
6:00-6:30	Snacks & Networking (Foyer area)

## Speakers



**Romelia Flores** 

IBM Distinguished Engineer & Master Inventor

## Augmented Intelligence on the Cloud - IBM Watson and Quantum

This presentation will give you a feel for IBM's Watson technology and the future of IBM's Quantum technology. These technologies provide a platform for future innovation.

Romelia Flores is one of IBM's top 500 technical executives, earning the titles of IBM Distinguished Engineer and IBM Master Inventor. She has collaborated with some of IBM's largest clients around technology innovation, Smarter Cities and Cognitive technology and is currently focused on IBM Design Thinking. Romelia holds 34 patents with an additional 30 patents pending. She has personally trained thousands of IBMers, and specifically focuses on early-career professionals from the Millennial Generation. Romelia is a University of Texas alumnus and Baylor Honorary alumnus. In 2016, Romelia received the Great Minds in STEM Lifetime Achievement award and the Dallas Business Journal's 2016 Women in Technology Award.



Vijay Reddy

Serial Entrepreneur and Founder of GeoSpell Academy

#### **Future of AI in Education**

We will discuss how adaptive intelligent learning, analytics, cloud computing, mobile apps, etc., could all be used to help students learn better, and prepare more efficiently for their tests and competitions. This should help all students, from special ed to gifted & talented.

Vijay Reddy is a serial entrepreneur and presently the Founder of GeoSpell Academy, which develops educational content to help students prepare for tests and competitions such as Spelling Bee, Vocabulary, Geography Bee, STAAR, SAT, etc. Prior to starting GeoSpell, Vijay had worked in various middlemanagement positions at IBM, Sprint and MCI WorldCom. Vijay also co-founded Ipelion Inc., InventX, Inc. and Radius Academy. Vijay is an alumnus of UT Dallas, having graduated with an MS (Elec Eng) degree in 1992. He also has an MBA from University of Dallas.



**Dave Mark** 

President & Lead Designer at Intrinsic Algorithm LLC

#### AI in Games: It's Probably Not What You Think

Dave is the president and lead designer of Intrinsic Algorithm, an independent game development studio in Omaha, Nebraska. He does consulting on AI, game design, and mathematical modeling for clients ranging from small indie game studios to AAA companies including EA, Sony Online Entertainment, and ArenaNet.

Dave is the author of the book "Behavioral Mathematics for Game AI" and is a contributor to the "AI Game Programming Wisdom", "Game Programming Gems", and "Game AI Pro" book series. He has also spoken at numerous game conferences and universities around the world on the subjects of AI, game theory, and psychology of games.

He is a founding member of the AI Game Programmers Guild and has been a co-advisor for the AI Summit at GDC for 9 years.

Dave continues to further his education by attending the University of Life. He has no plans to graduate any time soon.



**Dr. Vincent Ng** 

UT Dallas CS Faculty

#### **Uphill Battles in Natural Language Processing**

Natural language processing (NLP) is often said to be "AI-complete", meaning that the most challenging problems in artificial intelligence manifest themselves in natural language phenomena. Some researchers observed that the majority of the NLP tasks follow the 80/20 rule: while 80% of the task can be addressed using shallow text understanding (the "easy victories"), the remaining 20% can only be solved by reasoning with sophisticated knowledge (the "uphill battles"). Now that the easy victories have largely been achieved, NLP researchers have started the uphill battles in recent years.

In this talk, I will give an overview of four ongoing projects in my lab, which belong to the areas of automated essay grading, argumentation mining, pronoun resolution, and joint inference for NLP. I will describe the victories we have achieved and the battles we are fighting, sketching our long-term goals and vision for each project.



**Jamie Erbes** 

Technical Director, Enterprise Cloud, CTO Office at Google Cloud

#### **Machine Learning at Google**

AI, ML, MI, Neural Nets, Deep Learning... we're hearing and learning about the implication of these emerging technologies which aspire to model the functions of intelligence, especially human functions. Ms Erbes will discuss how these technologies have evolved, how they have already been applied toward real-world solutions in various industries such as healthcare, automotive, and financial services. She will also share a perspective of the future as machine intelligence intersects with the immense processing power of public clouds such as Google's Cloud Platform.

Jamie Erbes has more than 20 years of leadership, innovation and influence in network, data center, and workflow automation - with an emphasis in Enterprise IT. At Google, she works across product and engineering teams as a senior customer advocate to accelerate solving our customer's hardest business problems with Google Cloud products and services.

Previous to Google, Jamie was VP of Product Management and Product Marketing at VCE with go-to-market responsibilities of all market-facing products, services, and solutions for Vblock (™) Converged Infrastructure. Over her 3 years, VCE launched 12 new products and grew from \$500k to over \$2.3b annual run rate. This provided Jamie a unique insight to Enterprise private cloud initiatives. Jamie's career also includes HPLabs as HP Fellow and Director of Software and Services Research. Also, at EDS she served as an EDS Fellow and CTO of their \$8b infrastructure outsourcing business.



**Bob Crovella** 

Solution Architect Manager at NVIDIA

## Artificial Intelligence: The Next Frontier for High Performance Computing

Bob Crovella is a Solution Architect Manager with NVIDIA. He leads a team that is focused on providing technical resources to customers and OEMs to support and enable adoption of GPU computing. He delivers Deep Learning Workshops and GPU training to help raise awareness of GPU computing and AI Research. He also works with ISV and customer applications to assist in optimization for GPUs through the use of benchmarking and targeted code development efforts.



**Ken Koo**CEO at Bridge

Alliance

#### **Machine Learning to Augment Human Analysis**

Machine learning can be disruptive and additive to human performance at the same time. Just like computers did 60 years ago to manual calculations, AI will become the next generation technology to both disrupt human talent and create opportunity for higher value work for people. Learn how Bridge Alliance is utilizing machine learning technology with an ensemble model to augment human performance.



**Dr. Chris Davis**UT Dallas CS Faculty

## Minds, Machines, and Morality: Ethical Realms of Artificial Intelligence

From self-driving cars on our city streets to drones and robots in the battlefield, autonomous machines are becoming ubiquitous. As humans increasingly interact with them, the ethical considerations of their behavior become more significant. But how can machines act as moral agents? This talk examines computational models of ethical reasoning that are currently being explored in A.I. research.



