

# 2019 AI Conference Presentation Schedule

Time	Use-case Track ECSW 1.315	Technical Track ECSW 1.355
1:45 – 2:20	<b>Reimagining "Care" in Healthcare using AI,</b> Priyanka Kharat, Parkland Center for Clinical Innovation (PCCI)	<b>Implications of ML, AI and Distributed Ledgers in the Quantum Information Age,</b> John Hooks, Spectramesh
2:25 – 3pm	<b>The effects of AI/ML in Cybersecurity,</b> Brandon Niemczyk, Trend Micro	<b>Digital Transformation using Cloud, AI/ML and Data Analytics,</b> Logan Vadivelu
3:05 – 3:40	<b>Automated Object Detection and Robotic Software for onboarding listing features for Digital Marketplaces,</b> Ganapathy Subramanian, Infogain	<b>AI and Digital Assistant for Enterprise Workforce Collaboration,</b> Ramesh Lakshmanan, Infosys
3:45 – 4:30	<b>AI in InsureTech Market - Where is it going?</b> Uni Rosales Yost, GoAskJay	<b>Deep-dive into Real-time Sepsis Predictions,</b> Zhijie (Jet) Wang, Parkland Center for Clinical Innovation (PCCI)
4:30 – 4:45	<i>Break</i>	
4:45 – 5:20	<b>Voice of a Vehicle,</b> Greg Bohl, Harman Connected Services	<b>Enterprise AI and Deep Learning with Mobile Technologies,</b> Carlos Lara, Poincare Group
5:25 – 6pm	<b>Future of Driving and AI,</b> Meltem Ballan, General Motors	<b>The Art of Building &amp; Extracting Intelligence From Digital Assets,</b> Suren Konathala, Adobe
6:05 – 6:40	<b>Azure Cognitive Services and the J.F.K Files,</b> Kenny Kinder & Ray Rios, Microsoft	<b>Human Allied Artificial Intelligence,</b> Devendra Dhami, UT Dallas
6:45 – 7:20	<b>Patterns and Field Practices in Frontier Technologies with AI,</b> Gurvinder Ahluwalia, Digital Twin Labs	<b>Conversational AI,</b> Priyanath Maji & Ganesh S, Infosys
7:25 – 8pm	<b>AI's Role in Personalized Care (Life Sciences),</b> Raj Pallapothu, Bayer & Bio9 Ventures	<b>Bots in Workplace,</b> Nipun Sharma, UiPath

## Description of Tech-Talks & Speaker Information





**Topic #1:** Reimagining "Care" in Healthcare using AI

**Presenter:** [Priyanka Kharat](#), VP of Technology, Parkland Center for Clinical Innovation (PCCI)

Priyanka leads a multi-disciplinary team of data scientists, analysts, software architects to build machine learning solutions harnessing latest machine learning and artificial intelligence algorithms to risk stratify the most neglected and marginalized population of Dallas and coordinate care across the community based organizations through healthcare providers and payers.

At PCCI, as a technologist, Priyanka consolidated PCCI's siloed advanced analytics solutions spread across various modalities like mobile applications, internet-of-things devices, and clinical decision support system under a common secure cloud infrastructure called PCCIPortal. She built the first technology team to streamline predictive model development lifecycle from data ingestion, feature engineering, analysis to building predictive models. The platform developed by her team called PCCIPredict is the first-of-its-kind cloud hosted HIPAA-compliant, real-time, healthcare-specific interoperable and configurable predictive model deployment platform which can be integrated into any workflow from Electronic Health Record systems of hospitals to the patient and community-based organization facing solutions. Recently selected as an honoree for Dallas Business Journal's 2019 Women in Technology Awards, Priyanka and her teams at PCCI want to continue honing this unique platform infused with hooks for clinician guidance and

	<p>interpretation to fuel innovation and operationalization of cutting-edge healthcare predictive models and usher in a new phase of "Responsible AI" in Healthcare.</p>
	<p><b>Topic #2: Implications of ML, AI and Distributed Ledgers in the Quantum Information Age</b>  <b>Presenter: John Hooks</b>, C-Level Technology Executive, Venture Capital Adviser &amp; Published Author</p> <p>The convergence of three emergent technologies: Quantum Computing (QC), Intelligent Learning Systems (AI, ML), and Distributed Ledgers (DLT) will likely have a transforming impact on our society and shape the future of Computer Science &amp; Information Technology. In this session, we cover the main ideas, recent developments, and progress in a broad spectrum of research, development &amp; commercialization efforts for ML, AI and DLT in the quantum domain. As an example, quantum computing is finding a vital application in providing speed-ups in ML, critical in our "big data" world. Finally, we cover some use cases in Logistics, Energy, and Cybersecurity that can leverage these three technologies including a secure and transparent distributed personal data (PII) marketplace combining DLT, QC cryptographic algorithms and deep learning technologies.</p> <p>Mr. Hooks is a Venture Capital/Private Equity Advisor and Council Member in the Technology and Telecommunications Practice of the Gerson Lehrman Group (GLG), and an investor in, and Advisory Board Member/C-level executive at several emerging AI, Blockchain, and Quantum Computing companies. Currently, Mr. Hooks is CEO of Spectramesh, Inc. and Artificial Intelligence Lead at AmmbrTech US, Inc, both headquartered in Dallas, TX. He is also Chief Hardware Architect for Dallas based tokenized energy trading platform developer Illum Applied Technologies, Inc., and Virtual Power Plant, LLC.</p>
	<p><b>Topic #3: The effects of AI/ML in cybersecurity</b>  <b>Presenter: Brandon Niemczyk</b>, Security Architect, Trend Micro</p> <p>Modern machine learning and other AI methods along with the data collected to enable it has some deep ramifications on what it means to be secure. We will discuss the various ways that AI intersects with information security, what challenges it presents, and what new problems need to be solved.</p> <p>When you don't find Brandon outdoors, you can usually find him glued to his computer monitor or a piece of paper experimenting with some idea. His passion for both security and machine learning have lead him to a career of offensive and defensive research with a numerical twist. If you want to discuss linear algebra, the impacts of big data collection, or the internals of your favorite compiler, find Brandon at the local pub and start a conversation with him.</p>
	<p><b>Topic #4: Digital Transformation using Cloud, AI/ML and Data Analytics</b>  <b>Presenter: Logan Vadivelu</b>, Technology Leader &amp; Cloud Engineer, Google</p>
	<p><b>Topic #5: Automated Object Detection and Robotic Software for onboarding listing features for Digital Marketplaces</b>  <b>Presenter: Ganapathy Subramanian</b>, VP &amp; Global Head - Digital Experience, Infogain</p> <p>Gans has more than 20 years of leadership experience advising CXOs on Business Strategy and Technology Technology. He is responsible for leading the Digital Experience Portfolio including Transformation Consulting, AI/ML, UX Engineering, Robotic Automation, Analytics, Social, Mobility and Semantic Search.</p>



**Topic #6:** AI and Digital Assistant for Enterprise Workforce collaboration  
**Presenter:** [Ramesh Lakshmanan](#), AVP - Digital, AI & Automation, Infosys



**Topic #7:** AI in InsureTech Market - Where is it going?  
**Presenter:** [Uni Rosales Yost](#), CEO/Founder, GoAskJay

The global insurance market is over \$4 Trillion and growing. The insurance industry is faced with changes in market demand and customer’s expectation are forcing changes. Changes in technology including AI, Blockchain, Voice and IoT are creating a high demand for technology specialists in data science, machine learning, developers (web/mobile), game and business operations.

Uni Yost is a female serial entrepreneur in technology and business for over 20 years. Leading and managing multiple businesses that focus on creating new products and services. Experienced in technology, consulting and software development in multiple industries; healthcare, real estate, finance, engineering, banking, etc.

Currently Uni is the CEO/Founder of a disruptive Insurtech and Fintech platform in a \$4 trillion market, with a vision for global growth. Excited and happy to lead all women executive leadership team to grow the company in the US and beyond to a multi-billion-dollar company within 5 years.



**Topic #8:** Deep-dive into Real-time Sepsis Predictions  
**Presenter:** Zhijie (Jet) Wang, Director of Data Science, Parkland Center for Clinical Innovation (PCCI).

Sepsis is one of the leading causes of mortality worldwide. There are more than 750,000 sepsis hospitalizations in the United States annually that cause approximately 200,000 deaths. Early detection and treatment is key to lowering mortality rate since every hour of delay increases the odds of mortality by 20%. PCCI developed a predictive model to predict in real-time the individual risk of a patient becoming septic in the next 12 hours. The model achieves an AUC of 0.91 with accuracy 95%. This sepsis model was baked into clinical workflows through industry standard APIs. The model accesses EHR data in real time via APIs every five minutes and alerts the clinician if the risk is above a certain threshold.

Zhijie Wang has over 10 years of work experience in healthcare analytics and predictive modeling. He currently serves as Director of Data Science at Parkland Center for Clinical Innovation (PCCI). Before joining PCCI, Zhijie worked at Carolinas HealthCare System as a Senior Statistician for 3 years. Before that, he worked at University of Pittsburgh Medical Center (UPMC) as a Statistician for 4 years. Zhijie obtained a master’s degree in Statistics from Bowling Green State University.



**Topic #9:** Automotive AI and Voice of the Vehicle  
**Presenter:** [Greg Bohl](#), VP – Artificial Intelligence, Harman Connected Services

The vehicle available today had evolved into one of the most complex software and computing platforms available to the average consumer. The volume of data generated from an autonomous vehicle can surpass one terabyte a second. If we listen carefully, the data flow becomes the voice of the vehicle and will tell us many things about itself, its occupants, and the world around it. This discussion will review the commercial aspects of vehicle data as well as the software methods used both onboard (embedded) and cloud based to produce value.

Greg Bohl is Vice President, automotive Artificial Intelligence for Harman Connected Services. His work with AI was launched over 20 years ago while at the Sabre Group and has continued through several companies including multiple start-ups. Greg has worked globally with OEMs defining a path of how Machine Learning (ML) and Deep Learning (DL) can be used in the connected car. He is a frequent contributor and speaker on the topic of automotive artificial intelligence. Publications range from numerical studies in clean technology through patents for predictive systems and methods used in the automotive industry. Greg has earned a BS-IS and MBA from the University of Texas, Arlington.



**Topic #10: Enterprise AI and Deep Learning with Mobile Technologies**  
**Presenter: Carlos Lara**, AI Technical Founder and CEO, Poincaré Group

We will discuss how to approach creating a brand-new deep learning project for an enterprise. We will begin by exploring the value of fast prototyping and research using PyTorch or TF Keras. Then, we will focus on engineering end-to-end computer vision pipelines using TensorFlow, including mobile deployment to iOS and Android in production using TensorFlow Lite.

Carlos Lara is the technical founder and CEO of Poincaré Group, enterprise AI consulting firm headquartered in Dallas, TX. He is a senior AI consultant and deep learning engineer with a background in mathematics, theoretical physics, nuclear engineering, mobile application development, public speaking, and startups. Carlos also founded the AI Technical Founders Meetup and the Technical Founders YouTube channel, with the mission to empower entrepreneurs and engineers to become AI technical founders. He loves mentoring and teaching others how to develop deep learning models, cross-platform mobile applications, and the success mindset. Carlos is deeply passionate about AI, business, public speaking, personal development, and success.



**Topic #11: Future of Driving and AI**  
**Presenter: Dr. Meltem Ballan**, Data Scientist, General Motors

Driving and sitting at a passenger seat are part of our daily life experiences. Over the years, the experience and expectations have changed. Just 20 years ago the driving experience was about mechanical advancements; now we talk about vehicle as a connected platform. The main parts of the talk will be on history of vehicles and driving as well as the technological advancements. The talk will develop around human experience and how to take the human out of driving equation and to project a self-driving car experience. The main components of self-driving cars are not the engines anymore; but, the AI technologies allowing to crunch telemetry data and provide instant insights. I will provide a quick summary of the AI techniques and models before I close my talk.

Meltem is an experienced leader, data scientist and strategist with a unique combination of analytical and leadership expertise of 10 years in industry, and 10 years in academia. She recently joined GM as a senior member of Chief Data and Analytics Office. During her career, she has designed complex machine learning models and implemented AI projects including natural language processing (NLP), linear and logistic regression, supervised and unsupervised learning, deep learning algorithms (CNN & RNN) and hybrid approaches of computer vision. Her passion for cognitive and biological bases of data prompted her to have a career in academia where she received a degree in Complex Systems and Brain Sciences with a minor in cognitive and behavioral neuroscience. She implemented her knowledge of neuroscience and analytics while a professor at the University of North Carolina Chapel Hill Medical School.



**Topic #12: The Art of Building & Extracting Intelligence From Digital Assets**  
**Presenter: Suren Konathala**, Technical Architect, Adobe

Digital assets are key resources for many organizations. Even though a lot of technical infrastructure is built around them like DAMs, Analytics, Websites, these solutions do not make the assets smart. Also lot of manual work is spent to extract metadata from them. In this session, I will discuss & demo simple ways to process digital assets using existing sophisticated technologies to extract & build intelligence around/with them. The best part is that, neither you need to have AI/ML knowledge nor write complex algorithms.

Suren Konathala is a passionate, technology specialist on a mission to simplify technology adoption for organizations. He is a developer, architect, consultant and love to Write and Talk about technology. He works at Adobe as a Technical Architect, holds a Masters degree in Computer science and studied at Carnegie Mellon and Stanford universities. With over 18 years of industry experience working in several levels at small to fortune 100 companies. He is a great speaker, presenter, author, mentor and enjoys sharing his knowledge.



**Topic #13: Azure Cognitive Services and the J.F.K Files**  
**Presenters:** [Kenny Kinder](#) Advanced Analytics & AI Lead & [Ray Rios](#), AI Solutions Professional, Microsoft



*Ever wonder who killed J.F.K?* In this session we will breakdown how the Microsoft Corporation views Artificial Intelligence and its realistic application into one of the World's Most Famous Unsolved Mysteries. We will start the conversation with the difference between applied and custom artificial intelligence and then walk you through how we applied it to over 34,000 pages from 60 years ago to demonstrate the power of an idea.



**Topic #14: Human Allied Artificial Intelligence**  
**Presenter:** [Devendra Dhami](#), Doctorate Student in Computer Science, UT Dallas

Statistical Relational AI (StaRAI) Models combine the powerful formalisms of probability theory and first-order logic to handle uncertainty in large, complex problems. One of the key attractive properties of StaRAI models is that they use a rich representation for modeling the domain that potentially allows for seam-less human interaction. However, in current StaRAI research, the human is restricted to either being a mere labeler or being an oracle who provides the entire model. I will present the recent progress that allows for more reasonable human interaction where the human input is taken as "advice" and the learning algorithm combines this advice with data. I will also discuss more recent work on soliciting advice from humans as needed that allows for seamless interactions with the human expert.

Devendra is a PhD student under Prof. Sriraam Natarajan in StARLing lab at The University of Texas at Dallas. I am especially interested in development and application of Machine Learning algorithms for medical domain and have published papers in AAAI, AIME and Smart health journal. I am also interested in creating human in the loop deep models and use them in various real domains. Before coming to UTD i have completed my masters from Indiana University in 2015 with my master's thesis focused on ' Morphological Classification of Galaxies into Spirals and Non-Spirals'.



**Topic #15: Patterns and Field Practices in Frontier Technologies with AI**  
**Presenter:** [Gurvinder Ahluwalia](#), Founder & CEO, Digital Twin Labs

Over his career, Gurvinder has stewarded the industry, clients, and open source communities through our recent waves of technologies – from Internet to Web to Mobile to Cloud, and now to Blockchain. Early in his career Guri deployed the second largest routed network in the world at the dawn of TCP/IP. Around 1999, Guri had a front row set at helping P&G pioneer RFID for supply chain and security which led to formation of MIT Auto-ID initiative and coining the term "Internet of Things". More recently, his contributions in the use of Blockchain as a next-generation architecture for IoT are widely regarded in the industry. Digital Twin Labs marque outcomes include the build out of the global supply chain for diamonds on blockchain for DeBeers London and leading the innovation program based on AI/ML and Blockchain for one of the largest real estate mortgage institutions in the credit and capital market world.

Previously, Gurvinder was the CTO for IBM's Blockchain-IoT-Cloud unit covering North America. Guri was one of the original arsonists of the blockchain fire at IBM. Gurvinder is also Adjunct Faculty at UT Dallas. He has been a speaker at Davos, Stanford, US Federal Reserve, Google, MIT, UC Berkeley, and recently back from his talks at the World Automotive Conference in Turkey and World Food Congress in India. Gurvinder is a member of the MIT Technology Review Global Panel and an alumnus of The IBM Academy of Technology.



**Topic #16: Conversational AI**

**Presenters:** [Priyanath Maji](#), Senior Project Manager & [Ganesh S](#), Senior Technical Architect, Infosys

Artificial intelligence (AI) is becoming a critical component of everyone's life. Amongst all, conversational AI seems to be leading the charge. Chatbots and virtual assistants are finding their use in almost everything ranging from household needs to enterprise applications as customer assistants, enterprise assistants, personal assistants, and use case specific chat agents. In this session, we will start with the basics, dive into the conversational platforms and discuss some of the use cases that we are working with our enterprise customers in this field.

Priyanath is a Senior Technical Manager in the AI & Automation practice of Infosys. He has over 17 years of experience in delivering large-scale technology-led business transformation programs in Digital, CRM, Integration, and Data. In his current role, he is responsible for providing consulting and delivery expertise to customers in building chatbot interfaces, developing robotic process automation (RPA) and Machine Learning (ML) solutions. In the past, Priyanath has consulted and managed programs in the digital transformation space that have delivered significant value to clients.



**Topic #17: AI's role in personalized care (Life Sciences)**

**Presenter:** [Raj Pallapothu](#), mHealth Global head, Bayer & Venture Capitalist, Bio9 Ventures



**Topic #18: Bots in Workplace**

**Presenter:** [Nipun Sharma](#), Sales and Consulting Executive, UiPath, assisted by Alok Srivastava & Darshan Patel, UiPath

Welcome to the world of Software Bots. We will talk about how UiPath is changing the dynamics of global workforce by having Bots and humans work together in modern workplace with Bots perfectly emulating human worker repetitive tasks, Acts as the hands, eyes, sometimes brain & No coffee breaks!

Nipun Sharma is Sales and Consulting executive with over 17+ years of experience in technology industry. He has a strong passion for creating bold & differentiated messaging, driving revenue, building relationships and leveraging progressive techniques, with a strong emphasis on customer centricity. He has demonstrated experience in managing large transformational engagements and partnerships, drafting real life use cases for applicability of emerging technologies like RPA, AI and ML, driving thought leadership, strong influencer engagement and generating new business.

Alok Shrivastava, VP, UiPath Learning, an experienced technologist leading the UiPath Academic Alliance to bring RPA skills in to the universities.

Darshan Patel, Experienced RPA consultant with an expertise in process discovery. He helps customers understand how to search for processes that can be executed leveraging a digital workforce.

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