Data Analytics 2022 Schedule

March 30, 2022

9:00-9:30AM: Opening Remarks

Speakers:

- Dr. Eric Darr, President of Harrisburg University of Science and Technology
- Kelly Logan, VP for Strategic Workforce Development and Universities
- Kevin Purcell, Program Lead for Data Analytics and Associate Professor of Data Science Harrisburg University

9:30-10:15AM: Keynote Presentation

Speaker:

- Morgan Templar, Vice President, Information Technology, Highmark Health

10:15-10:30AM: Break

10:30-11:15AM Breakout Session 1

Track 1: Scale Your Enterprise Analytic Capabilities Through Citizen Data Science

"Citizen Data Scientist," a term coined by Gartner, refers to an advanced data analyst or data engineer who can use machine learning technology to drive deeper analytical insights, identify trends and make predictions. Organizations of all sizes are becoming more data-driven but have struggled with the shortage of trained data scientists. To mitigate this supply problem innovative organizations are empowering their data analytics professionals and subject matter experts with the tools and support they need to become Citizen Data Scientists. Citizen data scientists typically reside within the data analytics organization or within a business unit like sales, marketing, or finance. These individuals possess deep domain knowledge of the business and the challenges their business units face. Armed with powerful open source and commercial products, they can perform deep dive diagnostic analysis and create machine learning models that supplement the work typically requiring a data scientist or statistician. In this presentation we will examine the low code/no-code tools and tricks of the Citizen Data Science trade. We will discuss how Citizen Data Scientists work in tandem with professional data scientists on projects that require detailed business expertise demonstrating how this allows the traditionally educated data scientist to focus on more complex projects that impacting the enterprise."

Speaker:

- Chuck Russell, Senior Partner, Collective Intelligence

Track 2: Using Data Analytics to Combat the Evolving Opioid Crisis

"The CDC has categorized the rapid rise in opioid overdose deaths in three waves. The first wave began with an increase in opioid prescribing in the 1990s, the second started in 2010 with a surge of heroin-related deaths, and the third arrived in 2013 with the rapid growth of synthetic opioids. A fourth wave of opioid deaths is now sweeping through states, one borne out of the social isolation, economic stress, and disrupted access to substance use disorder treatment. Provisional data from the CDC indicates that drug overdose deaths reached a record high of 93,331 in 2020 and saw the largest single-year percentage increase in deaths since 1999. Although governments have made tremendous investments in preventive strategies, harm mitigation efforts, and treatment resources, the opioid epidemic continues to grow and evolve. The shift from prescription drugs toward fentanyl analogues and increasing polysubstance use have forced governments to rapidly rethink their approaches to monitoring the crisis and engaging individuals into care. Data and analytics offer powerful tools to begin to turn the tide of the epidemic. During this session SAS will discuss how data integration and actionable analytics can empower governments to proactively monitor drug use and supply trends, identify individuals at risk, and ultimately save lives. Specifically, we will:
•Show the power of data visualization to monitor health impacts of the opioid crisis, including Hepatitis C infections and infectious endocarditis hospitalizations.

•Highlight the utility of analytic tools to monitor various facets of the epidemic and guide harm reduction and treatment strategies; and

•Demonstrate the importance of integrating disparate data, including law enforcement and PDMP data, to holistically understand risk and improve health outcomes."

Speaker:

- Dr. Meg Schaeffer, National Public Health Adviser, SAS Institute

Track 3: Building a Culture of Innovation in Your Government

Data enables innovation, but it is often a struggle to find where to start with building out a data analytics strategy. In this session, you will learn about methods and process to devise new analytics solutions to create a better citizen experience. We will provide a strong overview on how to cultivate a Culture of Innovation to transform your government with artificial intelligence solutions.

Speaker:

- Monica Terese Carranza, Principal Digital Innovation Lead, Amazon Web Services

11:30AM-12:15PM Breakout Session 2

Track 1: Bringing Data and Analytics to the Largest Public Health System in the US

New York City Health and Hospitals, the largest public health system in the United States, is currently underway with building its Data and Analytics Program under the direction of the Chief Data Officer. The overall goal of the program is to break down multiple data silos and then share the data in a secure and governed environment. This will enable entire enterprise including all 11 hospitals and outpatient facilities to make informed and timely decisions with Snowflake Data Cloud.

Speakers:

- Ed Haines, Account Executive, Snowflake
- Tommy Garcia, Sales Engineer, Snowflake

Track 2: Consumable Artificial Intelligence and Machine Learning Visualized in Tableau for Public Sector Decision-Making.
Integrating understandable artificial intelligence and machine learning into government decision-making is a common challenge throughout the public sector. Learn how Tableau makes artificial intelligence and machine learning (AI and ML) consumable for knowledge workers across your organization. The session will focus on public sector decision-making and is intended for beginner-level to advanced audiences. During this session, the speaker will: - Provide an understanding of Tableau's core areas of AI and ML - A live walkthrough of Tableau's AI and ML capabilities and their practical application in decision-making - Explore Tableau's Python and R integrations using: easy-to-implement deep-learning-based natural language processing - Champion challenger predictive modeling

Speakers:
- Anthony Young, Director, Solution Engineering, Tableau
- Josh Gillmore, Principal Solution Engineer, Tableau Software

Track 3: Unsupervised Learning: Expectation Maximization Algorithm
Expectation Maximization (EM) algorithm as implemented in Unsupervised Learning for data clustering will be explained in simple terms. An EM implementation running in Jupyter Notebook will be demoed taking unlabeled data as input, perform the EM clustering logic, and the resulting data clusters are shown graphically.

Speaker:
- Amir Bahmanyari, Advisory Engineer, Dell Technologies

12:15-1:15PM: Lunch Break

1:15-2:00PM Breakout Session 3

Track 1: Combatting Online Toxicity
This talk will describe an unsupervised method for detecting toxic speech within Twitch communities. The approach uses banned and deleted messages to build unique toxic classification models for computer mediated communication. Our goal is to create safe spaces by improving the moderation process with a system capable of growing and adapting to the unique social rules and linguistic differences found in online communities.

Speakers:
- Charles Palmer, Associate Professor, Harrisburg University

Track 2: Boost your metrics and ROI by using sentiment and personality to make your bot more human-centric.
"Most chatbots adhere to rules, read scripts, only understand keywords and aren't very smart. They can't interpret what the user really intends and if you get them off-script there's no telling what will happen. Often, this leads to frustration and users end the chat short, or eventually get handed off to a human, who then asks them everything over again making things worse.

This frustration leads to low success and high dissatisfaction rates with your customers, meaning users won't want to use your chat solution in the future. This directly impact opinions about your company's support as well as increases Tier-0 staffing costs and frustration.

Who wants to use keywords to trigger a set of rules, when you could converse in full sentences and have the system understand you, show empathy and crack a joke once and a while.

We'll talk about how to build a more human-centric conversational interface to boost your satisfaction and hopefully your deflection rates, saving your Tier-0 support time and money. "

Speaker:

- Jonathan Wheat, Head of Product Development, Nearly Human AI

Track 3: Data protection and Governance
Data loss prevention and data classification policies. It is important to understand and classify organization data. Once we understand sensitive, confidential data we can design DLP and Data Classification policies. This talk will introduce about such services in Cloud. How to identify alerts and investigate threats.

Speaker:

- Abhilasha Vyas, Vertical Head Cloud Security, CloudThat Technologies Bangalore

2:00-2:15PM: Break

2:15-3:00PM Breakout Session 4

Track 1: Building a Value Model for Data Science Projects
In this talk we'll look at how to organize a process to build business value-focused data science products. We'll introduce a framework for how to think about setting and relating business goals to data science outcomes. We then will show how exploratory data analysis can help support these goals, and then how to build modeling pipelines that are focused on business objectives. We'll close the presentation with 2 methods on how to measure the business unit financial value of model performance.

Speaker:

- Josh Patterson, CEO, Patterson Consulting

Track 2: From Theory to Practice: The Case of Panama big data ecosystem design and delivery.

Since March 8th, 2020, when Panama reported their first imported case of COVID-19, the National Innovation Authority of Panama(AIG) has been involved in most of all ICT organization, deployment, integration, design, and delivery of successfully nationwide solutions such as the learning management systems (ESTER) on Moodle, the conditional cash transfer programs using the Personal ID card as finance instrument (Vale Digital, awarded by the BID Bank), the introduction of geospatial data into the business process and architecture as never before (ie.ESRI Survey 123) for Social and Health programs, design the data collection (eg product inventory, temperature logs, geocode, etc) of vaccines (eg Pfizer, AstraZeneca) and integrate with the laboratory health records (legacy) and vaccination records to fully consolidate into a single citizen portal like "panamadigital.gob.pa" all information and providing citizens with their digital covid certificate which received the European Union DCC equivalence (1st country in Latin America and Caribbean to earn it), to name a few. The presentation aims to exchange the lessons learned, the challenges not only in data exploitation but how dramatically the strategic and tactical floor need to reshape their mindset and leadership to fully embrace artificial intelligence public policy, task forces, etc.

Speakers:

- Carlos Kan, Director, National Innovation Directorate, AIG
- Gina Villafañe, Information Science Consultant, AIG

Track 3: Application of Data Analytics in Blockchain

"Blockchain is a digital ledger which records transaction activities across many computer systems within the network. This presentation will discuss:

1. With a basic example what is a Blockchain, so that audience can grasp the intuition of the concept.
2. Discuss what are the use cases of Blockchain analytics why is this analytical exercise required.
3. Steps of analytical exercise that can be carried out.
4. The benefits of that analytical exercise."

Speaker:

- Chandrakant Maheshwari, First Vice President, NYCB

3:00-3:15PM: Break

3:15-4:00PM Breakout Session 5

Track 1: Labor Market Data and how it applies to Workforce Development.

SCPa Works, the South Central Pa Workforce Development Board is the operator of the PA CareerLink locations throughout the South Central Region. EMSI/Burning Glass has partnered with SCPa Works in order to provide up to date labor market information and data related to workforce development. It is of the Board's best interest to leverage and share accumulated data with the PA CareerLink and its partners, as well as Community Based Organizations and Educators who may benefit from relative data.

Speaker:

- Matt Ross, Business Services Program Officer, SCPA Works

Track 2: A story of integration: strategy to combat xenophobia against Venezuelan migrants in Colombia.

"By 2020, Colombia had received 1.6 million Venezuelan migrants according to Colombia Migration, the country's migration authority. This makes of Colombia the country with the highest number of Venezuelan migrants since the exodus began. When the COVID-19 pandemic started, Colombians' disapproval of the regularization of migrants and the opening of the Venezuelan border was above 80%, according to the Invamer national opinion survey.

The Border Agency had been created as a transitory advisory office to the President of the Republic in 2018. Three years after it was created, the communications team needed to set up its communication initiatives with a strategy based on data to reduce xenophobia, align state initiatives, structure cooperation and procure international funding. The objectives that guided the project during six months were:

- Warranting access to State services to the migrant population for their social and economic integration.
- Align national and local State entities to provide integral timely service to migrants.
- Coordinate service initiatives with international cooperation organizations and NGOs.
- Attract national and international financial support.
- Lead the unified narrative to communicate to Colombians about Venezuelan migration.
- Prevent and mitigate xenophobia against Venezuelan migrants.

With this strategy buho were bronze award winner in 2021 for the AMEC (international association for the measurement and evaluation of communication) Awards.

In this presentation we will explain how we did it and the achievements we reached ."

Speaker:

- Isabel Gonzalez, Narrative Director, Buho Media

Track 3: Why data-centric organizations have an advantage in the digital age.

"Data-centricity is the best tool businesses have to manage the exponentially growing complexity of their information & technology landscapes.
The goal of the talk is to explain the concept of data-centricity, it's increasing importance and the benefits it brings to organizations.
You will get answers to important questions such as:

- What is data-centricity, and why is it important?

- What are the benefits of building data-centric organizations?
- Where and how to apply data-centricity in your business?
- How data-centricity helps to maximize economic returns from data.

Target audience: Technology and data leaders and enthusiasts, innovation and strategy professionals, executives, entrepreneurs, founders.
The talk has been proven to be fairly engaging for this audience (we usually get 30-45 minutes of questions after the session - example: Toronto Data Professionals Community). A number of recordings of this talk are available on the net."

Speaker:

- Ruben Sardaryan, CEO & Founder, Infocratic