

iGIANT® Summit on Artificial Intelligence (AI)
November 8, 2018 - San Francisco, CA

Attendees:

Anupam Aggarwal, MD, MPH
Vice President, Global Head of Safety and Pharmacovigilance
Zogenix, Inc.

Zogenix is developing and commercializing therapies for central nervous system disorders that address specific clinical needs for people living with rare diseases and other CNS disorders who need innovative treatment alternatives to improve their daily functioning. Zogenix was founded in 2006 and has offices in California and the United Kingdom.

Chris Carberry
CEO, Explore Mars, Inc.

Explore Mars, Inc. was created to promote science and technology innovation and education with a use for Mars exploration. Not for profit set to put humans on Mars by 2033.

Eliza Lo Chin, MD, MPH
Executive Director, American Medical Women's Association

Founded in 1915, AMWA is an organization that works to advance women in medicine and improve women's health. AMWA's programs provide leadership, advocacy, education, mentoring and strategic alliances.

Nishan Degnarain, MPA/ID
Founder and CEO
Breakthrough Ocean Ventures

Using AI to solve major environmental challenges (eg illegal fishing, deforestation, climate change).

Yamina Hakem, MA
CEO
GlobalReach BI

Our mission at GlobalReach BI is to support Life Sciences partners in developing and marketing innovative patient treatments globally, through strategic intelligence. All Life Sciences industry segments, from biotech, medical devices to traditional pharma benefit from in depth intelligence to facilitate their decision making to stay ahead of their market.

Karin Hollerbach, PhD
Managing Director, Taku International

Taku International (TI) is a global management and IT consulting firm that helps clients achieve success with business processes and the systems used to implement them.

Marlena Jackson, BS
Founder, NexGeneGirls
Diversity Talent Partner, Genentech

Nex Gene Girls provides opportunities for young girls of color from low-income communities to participate in scientific processes through fun, hands-on science activities, lab experiments, and workshops that convey scientific principles while building self-confidence and developing the skills to problem-solve using math and technology.

Emily Keane, MA, MEng
Director of Analytics and Insights
Protagonist Technology

Protagonist is a narrative analytics company. We uncover deeply held beliefs (narratives) in order to energize brands, win competitive battles, and better engage and understand target audiences. Protagonist uses natural language processing, machine learning, and deep human expertise to gather and analyze billions of pieces relevant data to give customers the insights they need for marketing, product development, and communications strategies.

Saralyn Mark, MD
President and Founder, iGIANT®

iGIANT™ (impact of Gender/Sex on Innovation and Novel Technologies) is a nonprofit accelerating the translation of research into gender/sex-specific design elements such as products, programs, policies and protocols for the health, IT, transportation and retail sectors to improve the safety and quality of life, including work performance, for men and women.

Christine Meinders, MA, MFA
Founder
Feminist.AI

Feminist.AI is a community AI research and design group focused on critical making as a response to hegemonic AI. Rather than simply criticize the lack of diversity in AI design and development, we propose an alternative by co-designing intelligent products, experiences and futures from a feminist (inclusive) approach. Our research areas re-design thinking around healthcare, cities, and smart devices, with a larger focus on culture, ethics and privacy.

Tiffany V. Montague
Former Google Executive
Consultant, Flight Test Engineer

Laura Montoya, BS, CSM
Founder and CEO, Accel AI Institute
Founder and Managing Partner, Accel Impact

Accel AI Institute:

The mission of Accel.AI is to lower the barriers to entry in engineering artificial intelligence. We focus on integrating AI and Social Impact through consulting, workshops, and research on ethical AI development and applied AI engineering. Our target audience includes underrepresented groups in tech, social justice advocates, nonprofits, social impact startups, and those experiencing job loss due to automation.

LatinX in AI Coalition:

A subsidiary of the Accel AI Institute, LXAI is creating Harmony and Opportunity for Latinx in AI through increased representation in research, access to education and resources, improved awareness of the long and short-term effects of AI technology, transparency and accuracy of latinx culture and voice in data representations.

Accel Impact:

Platform for investing in early-stage emerging technology impact companies.

Kristin Neidlinger, MA
Founder, Biomedica Designer
Sensoree

SENSOREEs therapeutic biomedica is bioresponsive design for extimacy – externalized intimacy. SENSOREEs wearables monitor physiological states and translate feelings into auditory, visual, and or tactile displays. The tangible interface offers biofeedback as well as expression to promote awareness and empathy. SENSOREE gives the body a voice, with a fundamental emotive language.

Andrew Pratt, BS
CEO and Founder
BrainChild Innovation

BrainChild Innovation focuses on Clean Energy Tech and applying machine learning and autonomous systems to carry out expensive, repetitive, dangerous and dirty infrastructure inspection tasks. We build software and hardware including Ground, Aerial or Marine Unmanned Vehicles, client-specific object detection, and path planning algorithms, IoT and Mixed Reality device interfacing. Our flagship prototype detects damage to a Wind Turbine Blade within seconds compared to time-consuming manual processes used today.

Cara Silva, MPH
Director of Programs
YTH (Youth+Tech+Health)

YTH is a non-profit organization based in Oakland, California - with a global reach. Our mission is to advance the health and wellness of young people through technology. We work alongside young people to design innovative solutions to support vulnerable youth in staying healthy.

Jane Snowdon, PhD
Board Member, iGIANT®

Caroline Tai, PhD
Biostatistician
Evidation Health

Evidation Health is a new kind of health and measurement company that provides the technology and guidance to understand how everyday behavior and health interact. The volumes of behavior data generated from wearables and smartphones has opened up new ways to analyze individuals' behavior and health in real time. With a virtual pool of 2 million research participants, Evidation Health undertakes research for innovative biopharma and health care companies to transform how diseases are identified, treated, and monitored.

Jennifer Tran, PharmD
Health Outcomes Research
Evidation Health

Kairui Zeng, BS
CTO
DeepScribe

DeepScribe is an AI powered medical scribe that will prepare your EHR-ready documentation for you. Our device listens to your doctor-patient conversation, and automatically generates the note without the need of dictation.

Summary:

The first iGIANT® Summit on Artificial Intelligence (AI) convened a diverse group of leaders from various sectors including space, IT, life sciences, marine sciences, energy, and education. Participants shared experiences from their professional as well as personal experiences.

Discussion Highlights:

Artificial intelligence (AI) can be influenced by biases at many different levels from program design, software development, and data representation. Because of the human element, it may not be possible to completely eliminate gender bias in AI, but it is important to be aware of these issues. Additionally, it is critical to actively promote diversity and inclusion in order to acquire larger data sets. Global sharing of data can help foster this approach. However, as AI systems are promoted globally, local regulations need to be considered such as the European Union's General Data Protection Regulation (GDPR).

The application of AI can also be impacted by sex/gender differences in the interface of the AI platform. Examples include facial recognition which performs better for men because women, transgender and gender-nonconforming individuals as well as minorities are underrepresented in data sets and programmers (predominantly men) determine what is important in programming. In regard to speech to text platforms, custom acoustic models can serve as a solution. There can also be disparities and inequities related to access to AI.

AI can perpetuate gender stereotypes. Given that the majority of the machine learning field is male, biases in the architecture of AI products may propagate and reinforce ancient ideology on female roles in society. Examples include Siri, Cortana, and Alexa which are given traditional female names and are designed to be inoffensively pleasant and attractive.

On the other hand, AI can sometimes help counteract gender bias, for example, by helping to eliminate human biases in medical treatment algorithms, medical scribing, performance reviews or hiring processes. More opportunities are needed to enable user feedback. This approach can be marketed to companies as a tool to promote better user engagement, mitigate against liability, and the need to consider risk/tolerance in design. It is also important to engage youth in these discussions.

Overall, we need to build and utilize stronger and larger gender lenses for AI products. The first step to achieve this goal is raise awareness of these key issues and to ensure that questions are acknowledged.

The Summit culminated in a visit to the Microsoft Mixed Reality Capture Studio and a demonstration by Executive Producer, Hannah Bianchini, on the use of holograms in education, health, commerce, and art through augmented, virtual, and mixed reality platforms.