
???????????? AI

???????????? AI

???Ahmer Inam ? Mark Persaud



The global market for machine learning – counting hardware, software, and services – [is expected to reach \\$30.6 billion by 2024](#), achieving a 43 percent compound annual growth rate. Machine learning is supposed to help accelerate the adoption of artificial intelligence (AI) applications – [and yet the adoption of artificial intelligence remains low](#). We believe the solution is to employ machine learning operations – or MLOps – in a more inclusive, trustworthy, and responsible way that we call Mindful AI. Let's take a closer look.

MLOps accelerates the deployment of machine learning in support of AI applications for an enterprise. Technically, MLOps is a practice and set of shared responsibilities for collaboration and communication between data scientists, IT operations, and business stakeholders to build scale, and manage production machine learning-based enterprise solutions. The most important aspect of MLOps is its outcome: speed.

But AI needs more than speed to be adopted in widespread fashion. AI also requires trust. Unfortunately AI suffers from a trust issue, related to problems such as [lingering bias](#). By merging Mindful AI with MLOps, enterprises can take AI-based solutions to market faster – and also make those solutions more effective because they'll be more trustworthy, responsible, and human-centered.

As Centific executive Ahmer Inam and Mark Persaud discussed at a recent Cognilytica conference, Mindful AI consists of three components:

-
- **Human-centered:** end-to-end, human-in-the-loop integration in the AI solution development lifecycle, from concept, discovery, data collection, model testing, and training to scaling. The result is the creation of lovable experiences and products with measurable outcomes.
 - **Responsible:** ensuring that AI systems are free of bias and that they are grounded in ethics. Being mindful of how, why, and where data is created and their ethical impact on downstream AI systems.
 - **Trustworthy:** being transparent and explainable in how the AI model is trained, how it works, and why they recommend the outcomes.

By designing an AI application in a more mindful way from the start, a business will set itself up to be more effective and inclusive in its support of AI with machine learning. Fortunately tools such as the [Mindful AI Canvas](#) exist to help businesses to do that.

For more information on how to infuse MLOps with Mindful AI, please refer to [this podcast](#) that captures the content of Mark's and Ahmer's Cognilytica presentation. Contact Centific today to start succeeding with Mindful AI.

About the Authors:

Ahmer Inam is Chief AI Officer (CAIO) at Centific where he leads organizational transformation using artificial intelligence and human-centric design principles. He uses design thinking and AI innovation to build future-forward AI-enabled digital products that help the world's top brands deliver lovable experiences to their customers. He is an official member and contributor on the Forbes Technology Council where he publishes his thought leadership and expert opinion on a variety of topics such as:

- Intelligent Process Automation with Deep Learning and Reinforcement Learning
- AI Products and Solutions (Personalization, Recommendation, Forecasting, Segmentation, Fraud Detection, etc.)
- Smart Retail and Consumer-Centric Digitalization
- AI-Driven Language Services (Globalization, Localization, Translation, NLP/NLU)
- Data and Analytics Modernization Strategies and Technology Implementation
- Ambient Experiences (Conversational AI, Immersive Reality (AR/VR/Voice/Text), Environmental Experiences)

Mark Persaud is Head of Emerging Experiences at the Moonshot Innovation Outpost by Centific where he plays a pivotal role in combining Machine Learning with human-centric digital products. Mark works with top Global Fortune 500 companies to strategize, design, and enable the power of emerging technologies (Immersive Reality, IoT, AI, and Voice) through user-centered design practices on an enterprise scale. He is a facilitator and mentor of design sprints, entrepreneurship, Agile methodologies, all things product, and purpose-driven creative workshops to instill new ways of working and establish strong partnerships. His thought leadership on Voice and Immersive Technologies in the B2B and B2C space have been published on mainstream media outlets such as Tech Crunch, Hackernoon, and Data Driven Investor.

-
- -
 - -
 - -
 - -
 - -