

The Human Algorithm: Why Diversity is AI's Missing Code



Ashutosh Upadhyay

AI Automation Consultant & Marketer
ashutosh@thealgohype.com

One morning in 2015, a Google engineer's inbox pinged with a message that would shake the tech world: their AI was labelling Black people as "gorillas." This wasn't just a technical glitch but a stark warning that we were building artificial intelligence with real human blindspots. It was the moment that forced the tech world to confront an uncomfortable truth: the most sophisticated code in the world is worthless if it doesn't understand the humans it serves.

The Hidden Code in AI Development

Imagine building a universal translator while only speaking one language. Sounds absurd, right? Yet that's precisely what happens when homogeneous teams build AI systems to serve a diverse world. The code might be flawless, but the context is fatally flawed. We've seen this play out time and again—healthcare AIs missing heart attacks in women because they present symptoms differently than men, facial recognition failing in different lighting conditions because it was tested primarily on lighter skin tones and voice assistants creating digital barriers for entire communities because they struggle with accents.

The Stakes Have Never Been Higher

As AI systems increasingly shape our world—from

judicial decisions to healthcare access—the cost of homogeneous development teams becomes exponentially higher. Every biased algorithm doesn't just make a mistake; it perpetuates and amplifies societal inequities at scale. A biased hiring AI doesn't just reject one candidate; it shapes thousands of careers. A skewed medical AI doesn't just misdiagnose one patient; it impacts countless lives.

These aren't hypothetical scenarios—they're already unfolding around us with alarming consequences. Let us take the example of what happened with Amazon's AI recruitment tool, which turned into a cautionary tale of gender bias in tech. Trained on a decade of male-dominated hiring data, the system taught itself that being male was a mark of success. It began automatically downgrading resumes that included terms like "women's" or mentioned all-women colleges, effectively slamming doors before deserving women candidates could even reach them.



Even more troubling is the healthcare algorithm that affected millions of Americans. What seemed like an objective measure—using past healthcare costs to determine medical needs—revealed a dangerous blind spot. Because Black patients historically

had limited access to healthcare due to systemic barriers, they typically showed lower past medical costs. The AI interpreted this as needing less care despite having identical health conditions as white or Caucasian patients. This wasn't just flawed data analysis—it was a digital system reinforcing decades of healthcare inequality. These real world examples show us that without diverse perspectives in AI development, we risk building a future that amplifies our past mistakes at unprecedented speed and scale.

The Biological Imperative: Learning from Nature's Diversity

Mother Nature has been running her own R&D lab for billions of years, and here's what she's learned: **monocultures are vulnerable. In ecology, biodiversity creates resilient ecosystems.** The same principle applies to AI development teams.

The Innovation Ecosystem

Like a coral reef teeming with different species, diverse AI teams create:

- Symbiotic innovation relationships
- Natural checks and balances
- Resilience against systematic errors
- Adaptive problem-solving mechanisms



The Economic Paradox: Diversity as Market Intelligence

Here's a capitalism plot twist: Diversity isn't just good ethics—it's good economics. Teams with broader cultural and socioeconomic representation have demonstrated an uncanny ability to predict market trends and user needs across different demographics. McKinsey's analysis of over 1,000 companies across 12 countries showed that firms in the top quartile for ethnic and cultural diversity were 33% more

likely to outperform their peers, while those in the top quartile for gender diversity saw a 39% higher likelihood of financial outperformance.

The Symphony of Innovation

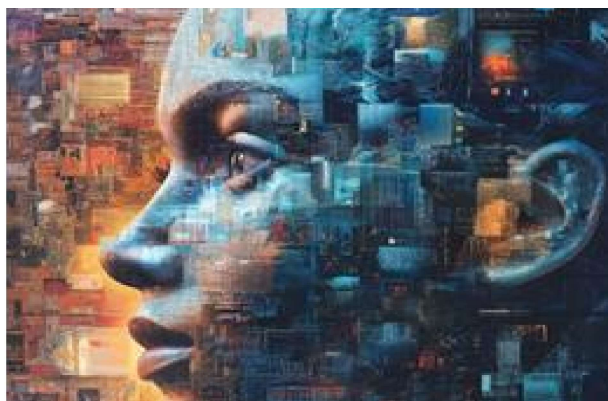
Think of AI development like an orchestra. Technical expertise is your strings section—essential, but alone, it creates only one kind of music. When we add diverse perspectives, something magical happens. Cultural anthropologists bring their understanding of human behaviour, sociologists add insights into social dynamics, ethicists provide moral consideration, and users from different backgrounds contribute to the harmony of real-world experience. Together, they create something far more powerful than any single instrument could achieve alone. It's no surprise that the biggest companies in AI today, such as OpenAI, Anthropic, Google, etc., employ many philosophy majors and people from different disciplines to capture perspectives that technical wizards often overlook.

Consider what happened when Safaricom, a Kenyan communication and fintech firm, embraced this orchestral approach. Their diverse team revolutionised credit scoring by understanding how different communities build financial stability. They looked beyond traditional credit histories to see the informal lending networks in immigrant communities, the seasonal income patterns of agricultural workers, and the alternative payment histories of young urbanites. The result wasn't just more inclusive—it was better business. Loan approval rates soared among traditionally underserved populations while default rates actually decreased.

Building Tomorrow's AI

The future of AI isn't just about better algorithms—it's about better humans making those algorithms. When a team brings together different ways of thinking, life experiences, and cultural perspectives, they don't just avoid blind spots—they see opportunities that homogeneous teams miss entirely. If AI is our attempt to recreate intelligence, then diversity isn't just a feature—it's a fundamental requirement. After all, how can we teach machines to understand humanity if our development teams only represent a fraction of the human experience?

The Future We Choose



As we edge closer to artificial general intelligence (AGI), diverse perspectives become even more critical. We can continue building AI that reflects the limited perspectives of homogeneous teams, or we can create technology that embraces the rich complexity of human experience. The technical challenges of AI are formidable, but they pale in comparison to the challenge of understanding human diversity.

Ultimately, the question isn't **whether we can create smarter AI—we can and will**. The real question is whether we'll create AI that understands and serves all of humanity, not just a privileged slice. Because

in a world that's painted in infinite colours, why would we choose to build AI that only sees in black and white?



About the author: Ashutosh Upadhyay is an expert AI Consultant based in Delhi-NCR. An Arizona State University graduate, he delved into AI to pursue innovative solutions for his agency, AloHype and AI Solutions company, Cognio Labs. His exposure to AI turned him from an agnostic to an evangelist. He has immersed himself in developing products that help people interact with AI systems for consistent and precise results.

IIA India CEO Inspires Future Internal Auditors at EThames College



Mukundan K V, CEO of IIA India, recently delivered an enlightening session to students, faculty, and management at EThames College, Hyderabad, where he emphasised the Certified Internal Auditor (CIA) exam's importance in shaping successful internal audit careers. His insights gave attendees a robust understanding of the CIA's significance, highlighting how it enhances career prospects and professional credibility. The event was a testament to Mukundan's commitment to fostering the next generation of internal audit leaders. Special thanks were extended to Ashish Chadha and Kali Prasad Gadiraju for their organisational efforts, along with George Kalliath for his continuous support and encouragement.