Artificial Intelligence (AI) & the Caribbean Data Revolution

DATA PRIVACY AND SECURITY IN THE CARIBBEAN

Presented by:
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AI – A Challenging Opportunity

- AI will have a larger impact in a shorter period than the Internet and mobile tech before

- AI's transformative impact will be widely felt – both positively and negatively

The Caribbean stands to be further marginalized in the global digital economy if AI is not effectively understood and leveraged across our societies and economies

AI – Data is Key to Digital Dominance

- The criticality of data to AI demands that the region adopt a much more deliberate and informed practice of collecting, storing and analyzing data.

- Without data the region will be unable to effectively maximize AI for our overall good

The Caribbean must adopt a new, more AI-relevant posture concerning data and the digital economy

New Posture for the New AI World

- An AI-aware posture will help inform how we understand, ==value== ==capture==, ==store==, ==analyze== and ==protect== data

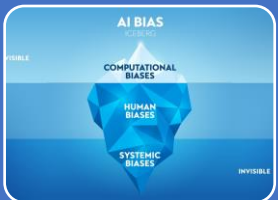# AI: Data privacy and Security Considerations

Hunting for AI Data Treasure
- Leveraging Existing Data with AI

Guarding the AI Galaxy
- Ensuring AI Dataset Security

Fighting AI Bias
- Addressing Bias in AI Solutions

Crystal Clear Algorithms
- Pursuing Model Transparency

Using AI to Extract Value from Existing Datasets

- AI applications have the ability to figure out who people are and reveal their identities even when data is supposed to be anonymous.

- They can also find ways to get around methods used to keep things secret.

  - AI applications can find patterns in non sensitive and disparate datasets and build profiles and predict behavior, create classifications (accurate or inaccurate) for targeting purposes
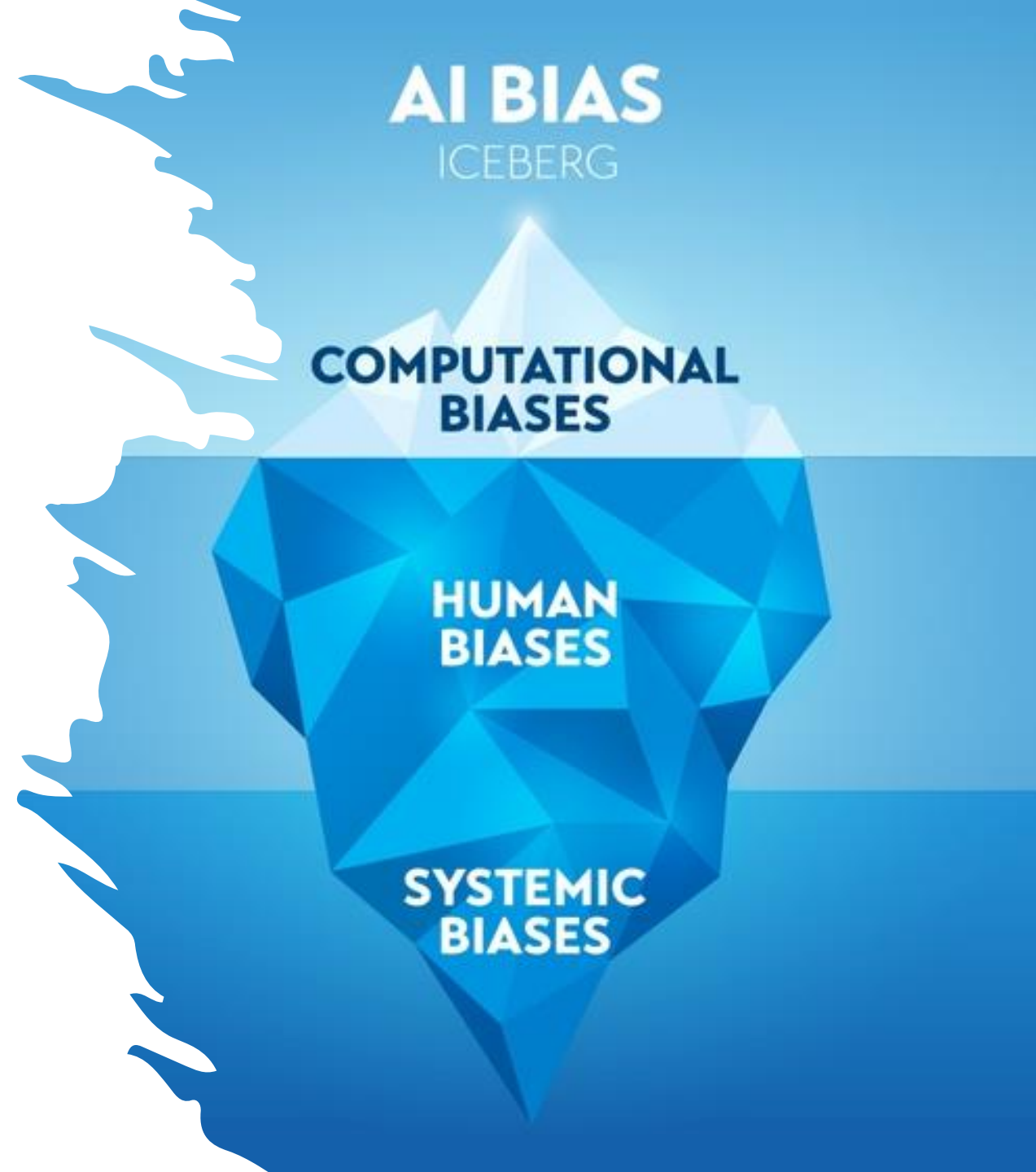
Keys to Guarding against AI exploits

- Adopt robust data protection policies, protocols and access controls
    - Adopting a security-centric posture around data will drive investment in securing data
- minimize the separation between sensitive and non-sensitive data within datasets.
    - AI's analytical capabilities thrive on data interrelationships, and by reducing the gap between these categories, we enhance our data security and privacy measures.
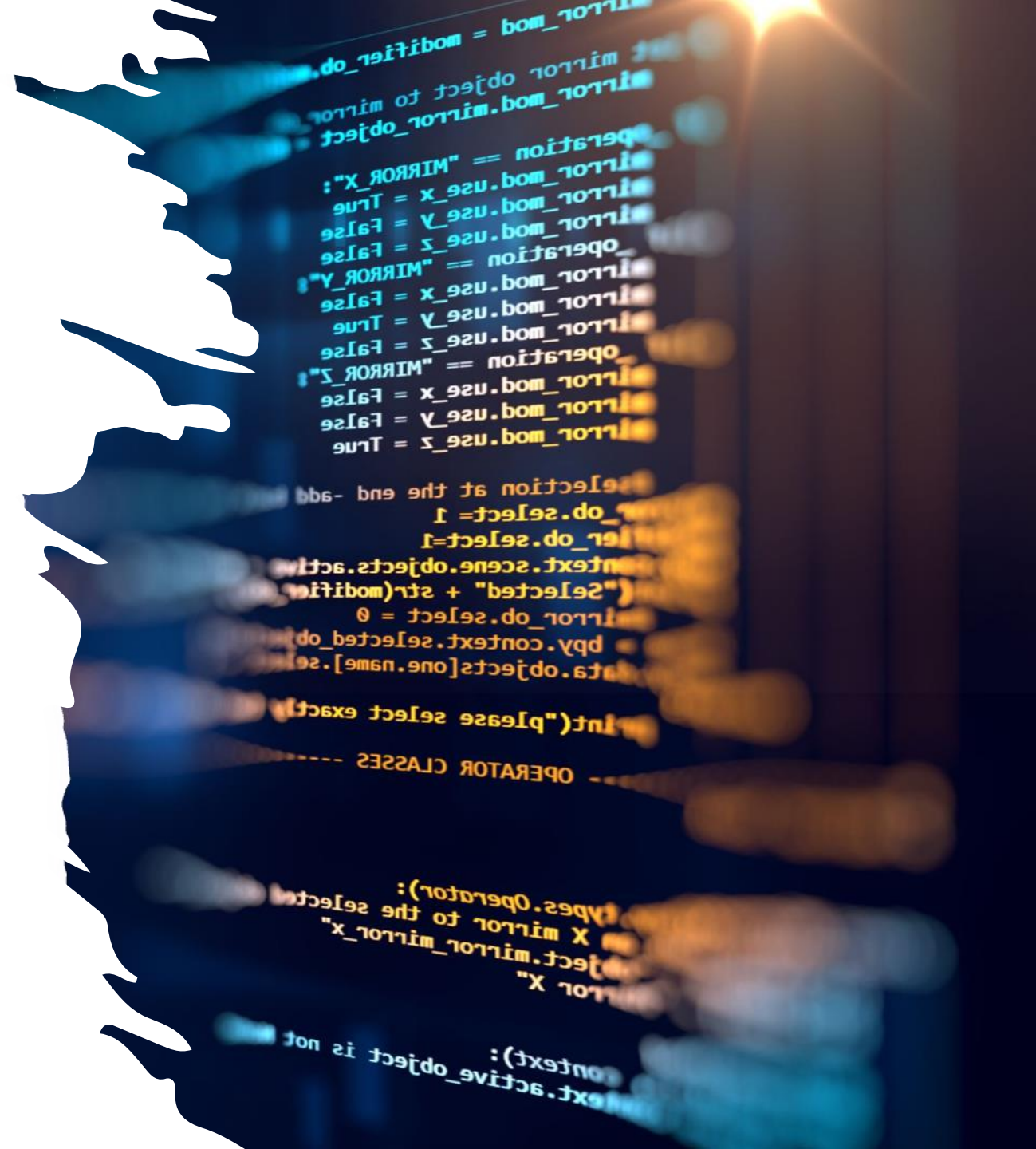
AI Bias: A Security Concern

- Biased datasets may lead to outcomes that can be considered similar to corrupted or compromised data.
  - Discriminatory decisions
  - Inaccurate profiling
  - Amplification of existing biases
- Caribbean data is underrepresented in most AI datasets

AI BIAS
ICEBERG

COMPUTATIONAL BIASES
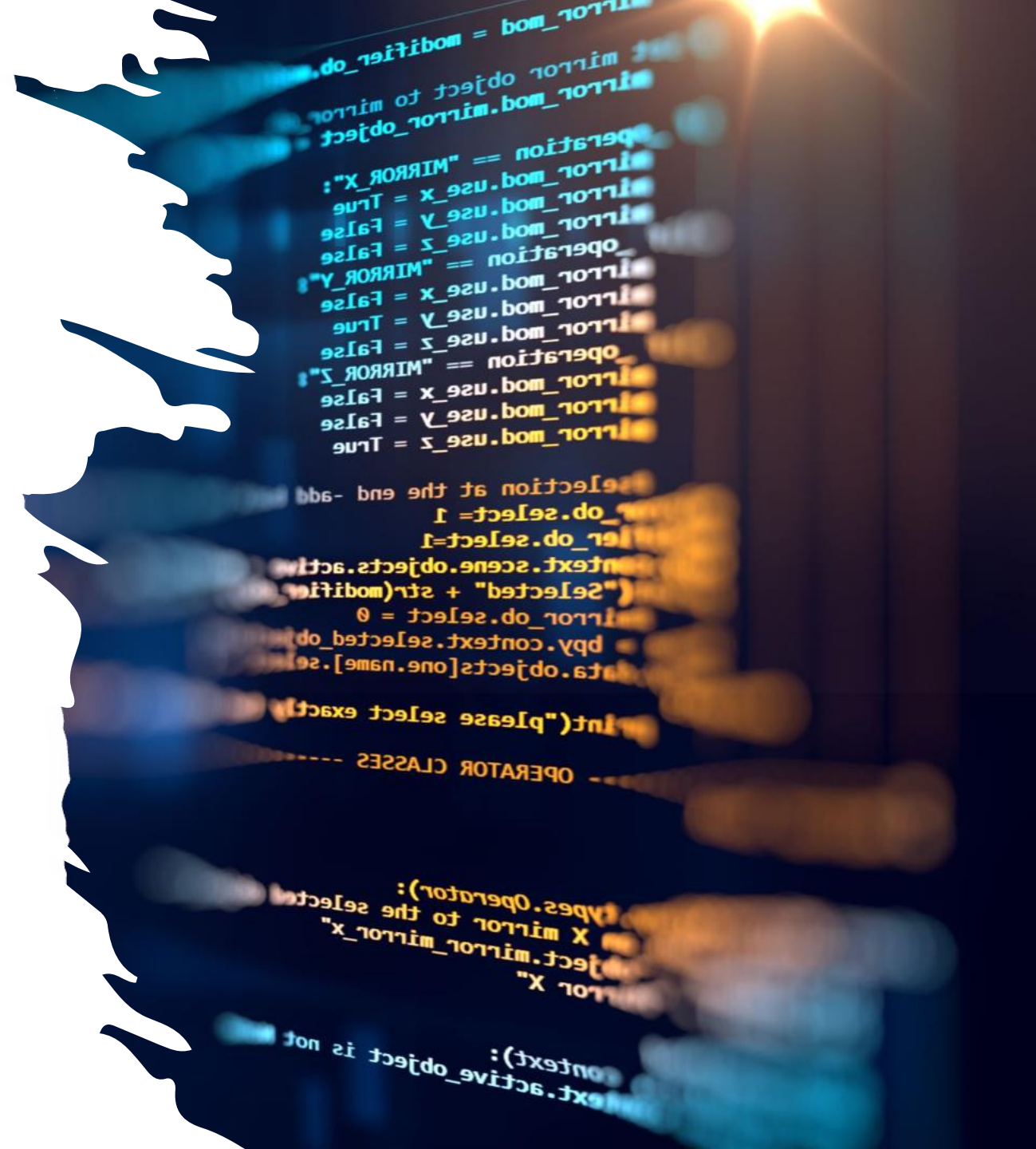
HUMAN BIASES

SYSTEMIC BIASES

Securing AI applications Datasets

- Data encryption and masking

- Strict security protocols

- Strong secure storage, access controls and authentication

- Training the AI models to mitigate attacks against them

- High data integrity, quality, consistency and relevance strategies

Pursuing Model Transparency

- Model transparency is important to build confidence
  - Show me the "working column"
  - But this is very difficult to do
- Might transparency efforts expose data?
  - These are active, ongoing considerations that the Caribbean must participate in

CLOSING THOUGHTS: AI, Data Privacy & Security

- It is **Critical** that we develop models that optimally represent the Caribbean context

  - Help ensure relevance and appropriateness

  - Actively participate in the global deliberations

  - Avoid using non-localized models

  - Invest in building Caribbean developed and trained AI, and AI expertise.

THANK YOU

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About the Speaker
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- Kevin Khelawan is a co-founder and CEO of US-based Advent AI, an AI software engineering and research firm and a co-founder of and Director at Teleios Systems an enterprise application development firm based in Trinidad and Tobago.

- He is an accomplished innovator and technology visionary with over 35 years of professional experience in the computer industry with an emphasis and focus on software development. Kevin has been involved in developing software for multiple industries and with a wide range of technologies and regularly advises leaders in the public and private sector about emerging technologies and their impact on business and society.