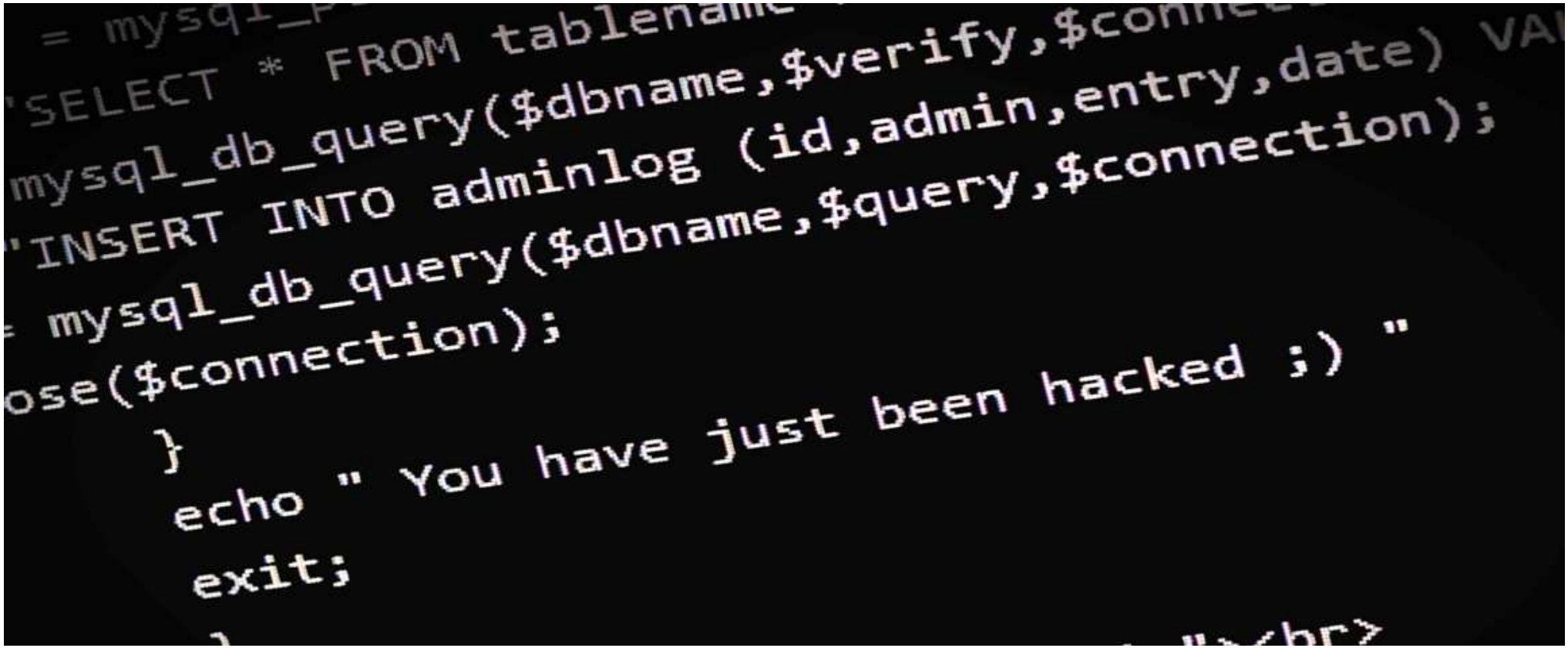
The New Era of Cyber-Threats: Shifting to Self-Learning, Self-Defending Networks

Sam Alderman-Miller, Account Executive

Agenda

- Understand the new trends in today's cyber-threats, including automated attacks, and 'trust attacks'
- Learn about an 'immune system' approach for cyber defence, based on machine learning and mathematics
- Discover real-world threat incidents that were not caught by traditional security controls – including IoT compromises

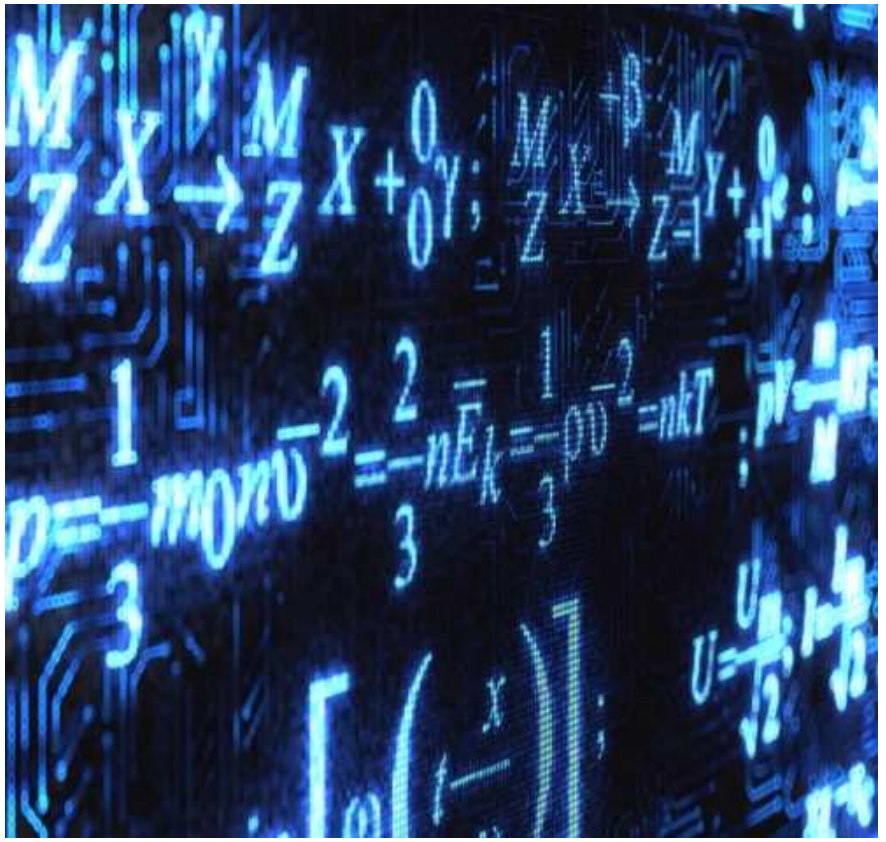
New Era of Cyber Threats: Automated Attacks



Trust Attacks

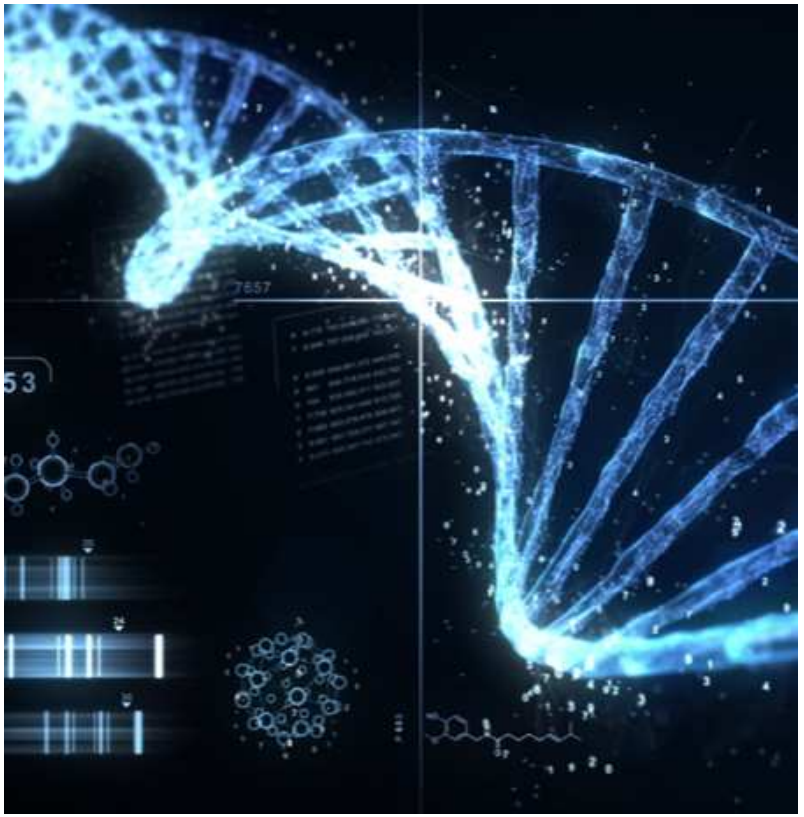
The Opportunity: Machine Learning & Mathematics

- Learns what is ‘normal’
- No need for prior knowledge & context (unsupervised)
- Saves you from being inundated by security alerts
- Models every user and device in the network
- Real time



An Immune System for the Enterprise?

- Sits in the heart of the network
- Starts modelling immediately
- Provides 100% visibility
- Identifies threats early
- Correlates weak indicators
- Allows for play-back and investigation



"It grows with you" – Financial Services customer

Real-World Threat: Biometric Scanner

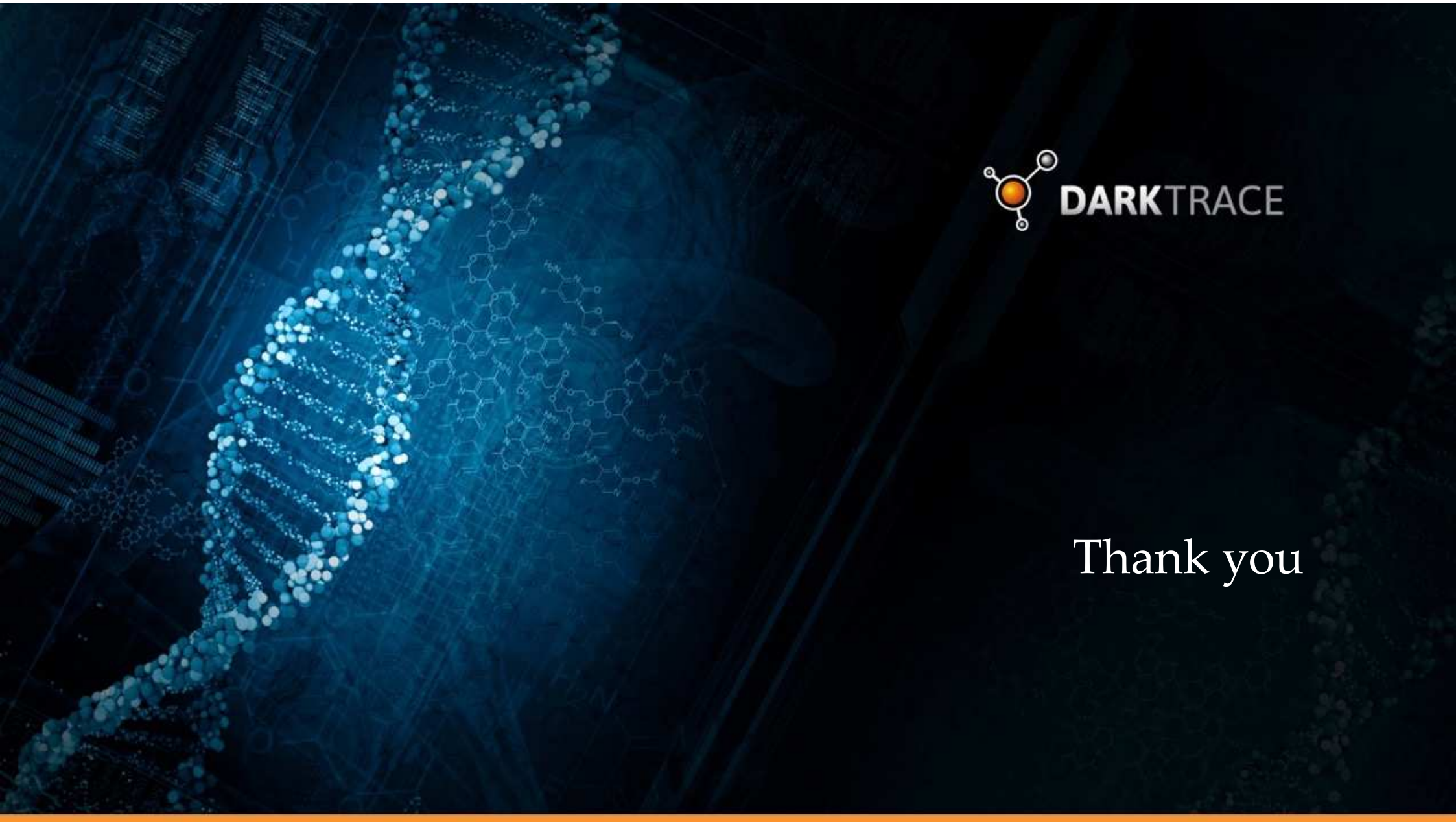
- Biometric building access system breached
- Fingerprint records taken from company network
- Physical security compromised by digital attack
- Hacker could alter levels of authorisation
- Logs edited to cover tracks

Organisations Using the Enterprise Immune System

BT
SEGA
Virgin trains
vodafone
apave
pwc
drax
Thomas Cook
Telstra
HSBC
Clinique romande de réadaptation
CLIFFORD CHANCE
T··Mobile···
Hortonworks
Vitol
IPREO
QUICKPLAY
Booz | Allen | Hamilton
METRO BANK
MARATHON
Wolf Greenfield
KOHL'S
CREACARD
IM irwinmitchell solicitors
Stanford Children's Health | Lucile Packard Children's Hospital Stanford
HUMAN LONGEVITY, INC.
Synoptek
SICPA
SC Johnson
wellcome trust
BALLINTRAE
Steelcase
FundSERV Inc. The Investment Fund Network
PHOENIX AMERICAN INCORPORATED
HCA Hospital Corporation of America
UST Global
Scott-Moncrieff business advisers and accountants
MARKS & SPENCER
DIRECTV
realise
HOLDINGHAM
paybay
Nutter Nutter McClennen & Fish LLP
VESPER
Balfour Beatty
KYOCERA
SFA
DNK
BREVAN HOWARD
DOLPHIN ENERGY
infinite insight
PRUDENTIAL

Conclusion

- The battlefield is now inside corporate networks
- Rules and signatures don’t work
- No security team, no matter how large, can keep up with new era of machine threats
- Darktrace uses a fundamental new approach


DARKTRACE
Thank you