

SGCSC Industry Day 2017, 17 November 2017

Invited Talk: "Holistic Security" by Prof Peter Cochrane OBE

SYNOPSIS: In a fully connected and complex world, solutions to problems in every sphere are no longer simple. Old techniques and thinking are pushed aside as non-linearity and emergent behaviour become the norm. So, it is no surprise that security organisations globally on the 'back foot' and struggling to cope with agile enemies that are faster to innovate.

"Our challenge is to get ahead of the game by embracing a multiplicity of tools and techniques"

The theatre of the National Security has now expanded to simultaneously include: People; Companies; Governments; Devices; Networks; Services; Vehicles; Properties; LAND; SEA; AIR; SPACE; CYBER. *Simple is no more!* We have to think and operate across all these domains at the same time, and we have to become even more adaptive than the enemy.

"In an ideal world our responses to Cyber and Terror would be automated and immediate"

The reality is that we continually expand the opportunity space for our enemies whilst we focus on isolation and containment. In contrast, the enemy operates across cooperative global market buying, selling and sharing knowledge and technologies. To survive, we have to do the same by connecting across all companies and government agencies. It is also essential that global cooperation is extended to new technologies such as the IoT from day one

"No nation is an island"

After briefly setting the wider scene we focus on behavioural analysis of people and things, and auto-immunity for the IoT as exemplars of how we might think about future security solutions.

END

Peter's presentations are high on high quality images, videos, animations and demonstrations with an emphasis on audience engagement and cognition. All presentation materials are made publicly available to audiences, and those interested, to download, store and use as they wish.

Prof Peter Cochrane OBE

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Peter is a seasoned professional with decades of hands-on management, technology and operational experience. After an extensive career at BT that saw him rise to Head of R&D and then CTO, Peter has been employed in the defence, logistics, travel, retail, energy, healthcare, transport and Pharma sectors. As an advisor and consultant he has been engaged by UK, USA and Qatar governments, whilst in industry he has worked for: HP, Motorola, Apple, 3M, Apple, Ford, NetApp Dupont, Sun, Cisco, BMW, and numerous investment and venture capital groups for >30 yrs. He is currently a Prof at The University of Suffolk, an independent consultant, and an advisor to QCRI and FaceBook.