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# Tigerspike world first; Karacell delivers faster, secure, quantum resistant 'made for mobile' video encryption

Independent testing has proved Tigerspike's new quantum resistant mobile encryption technology algorithm, <u>Karacell</u> is significantly faster than the industry standard, <u>AES.</u>

The amount of information being passed wirelessly is exploding. From medical devices to cars, information travelling from device to device in most cases is not encrypted. This information is then left open to attack, with potential catastrophic results. Prof Kevin Fu, University of Massachusetts, Amherst stated "Medical devices are reaching a stage where there are problems, there are vulnerabilities but there is a perceived lack of threats" in *Medical device hack attacks may kill, researchers warn*, highlighting the risks.

Tigerspike is tackling these threats and investing in revolutionizing mobile security by creating a new, more secure and faster encryption algorithm that out performs AES in both strength and speed which has been independently verified.

The key issue is that AES is slow and consumes a lot of power. Using AES in technology can slow things down dramatically, draining battery life and impacting performance. Frequently manufacturer's overcome these issues by avoiding encryption altogether, leaving data and critical technology exposed to hackers. To counter this, Tigerspike's Innovation Lab has created and registered a patent for a new encryption algorithm that is faster than anything on the market today.

Why is Karacell faster? Karacell is designed for parallel computing. AES was approved as a standard 12 years ago, when parallel computing was nascent and the Nokia 3310 was the best-selling mobile. Mobile phones now have 4 processors, and in future parallel processing will become more widespread. Karacell's design allows encryption to run across many processors yielding orders of magnitude faster than processing with AES or other encryption algorithms. Karacell enables data encryption stronger than military grade with no latency, having critical implications for everything from medical devices to day to day communications. Previous video applications such as Skype can now be encrypted with critical information remaining confidential and secure.

Luke Janssen, Tigerspike CEO adds "We know that security is critical when it comes to enterprise mobility, and are investing for the long term. Karacell will revolutionize mobile security and encryption in general, also giving our Phoenix platform a unique point of difference over other enterprise mobility platforms."

Stuart Christmas, head of Future Technologies at Tigerspike states "We have designed Karacell to have the ability to encrypt high-throughput video and sustain full-strength encryption on every frame, with no latency





Visit www.tigerspike.com to find out more about the Innovation Lab and Phoenix, Tigerspike's tools for unlocking the power of Personal Media Consulting | UI & UX Design | Multi-Platform Development | Licensing

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and immediate recovery from connection errors without introducing any additional delay (where AES is deficient)".





For more information about the tests contact Stuart Christmas at Tigerspike

# ENDS

### **About Tigerspike**

Tigerspike is a global Personal Media technology company, specialising in consulting, user experience and enterprise grade middleware. We believe that Personal Media has the power to transform the way we live and work.

Delivering large scale consumer and enterprise solutions across mobile, tablet and other Personal Media platforms, we enable our clients to form closer relationships with their customers, and implement working practices that support happier more productive workforces.

Our Kallide methodology enables us to produce consistently outstanding user experiences by enabling our software engineers to work in parallel with our user experience design teams. The Phoenix SaaS platform combined with our enterprise grade engineering skills provides seamless integration between our custom products and company business processes.

Tigerspike's clients include American Express, Westfield, Standard Chartered, The Economist, News Corporation, Shell, Merck, Suncorp, Woolworths and Vodafone. From 2003 Tigerspike has been transforming businesses from our offices in San Francisco, New York, London, Dubai, Singapore, Sydney and Melbourne by unlocking the power of Personal Media.

www.tigerspike.com





# About Stuart Christmas, Director of Future Technologies

Stuart graduated from the University of Kent in the UK with a Masters degree in Thermal and Nuclear Physics, during which time he designed Reverse Monte-Carlo simulations for determining the atomic structure of amorphous carbons that are still being used today at the Rutherford-Appleton laboratory in Oxfordshire.

Stuart subsequently went on to earn a PhD in Optoelectronics, designing optical fiber smart structures for British Aerospace and Airbus. He then moved to the state of Maryland where he joined a startup company that specialized in high-speed optical transport for VoIP, VoD and Gigabit Ethernet data. Stuart had multiple roles in this organization including Chief Engineer (under which title he earned a US Patent), and also functioned as the company's Senior Sales Engineer under which he secured deployments with Time Warner, Comcast, Cisco and AT&T among others.

After the company was successfully sold in 2006, Stuart went on to a Senior Sales role in ITW's structural test division, during which time he acquired a US Government security clearance, and acts as the senior account manager for all Aerospace, Military, Secure Government and Biomedical accounts.

During this time Stuart also earned an MBA from Loyola University with a Major in Computational Finance, graduating with first class honours.

Stuart joins Co-Founder Oliver Palmer, Tigerspike's Head of Innovation and will work in the Innovation Lab which is now housed and further funded via "Tigerspike Products Pte Ltd" a newly opened Singapore entity.

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