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Technology, a Hangzhou firm that provides security protection for financial transactions, Xinhua reported.

• Denmark's Danske Bank is piloting a contactless biometric card developed by Norway-based Zwipe that features an integrated fingerprint sensor and has received the backing of MasterCard, reports *NFC World*.

• The Mountain America Credit Union has released a beta biometric mobile banking login feature, combining fingerprint and eye-imaging technology. Members can log in to the Mountain America mobile app with the swipe of a finger or by using their phone's camera.

• First Internet Bank, Indiana US, is to provide Touch ID functionality for customers using its personal mobile banking application.

• Face++, a Chinese startup that makes facial recognition technology used by Ant Financial, the financial subsidiary of Alibaba, has secured an additional $25m for its series B round, reports *Techcrunch*. Based in Beijing, Face++ provides an API and SDK, along with custom cloud services, for companies that want to use its facial recognition technology. Ant Financial, which makes China's largest online payment platform Alipay, is reported to be seeking regulatory approval that would allow it to use Face++'s software to confirm the identities of people who want to set up an online bank account. The company's tech is also used in Alipay's 'smile to pay' service, which lets customers authenticate payments with a selfie.

• Systems integrator STME has announced that it has signed an agreement with Hitachi Europe to deliver digital signing solutions to the banking sector using Hitachi's biometric finger vein authentication technology.

• Standard Bank in South Africa has updated its banking app with fingerprint technology. Standard Bank iPhone and iPad users with device fingerprint readers were recently upgraded to use the hardware to log on to the banking application. Standard Bank plans to roll out this feature to biometrically-enabled Android phones in the near future, reports *Fin24*.

SayPay Technologies and VoiceVault partner to deliver online and mobile payment

SayPay Technologies, a payments start-up, and VoiceVault have partnered to deliver online and mobile payment solutions.

SayPay offers a solution for bill payments, online checkout and website sign-in. SayPay integrates into VoiceVault's ViGo product which enables voice authentication into new and existing apps.

VoiceVault provides the algorithms that analyse the unique characteristics of a user's voice, including three-dimensional modelling of their vocal and nasal tract as well as the uniqueness of the user's co-articulation between digits.

Biometric tech secures bitcoin wallet

US bitcoin technology firm Case has launched its bitcoin with multifactor security incorporating fingerprint biometrics. The standalone device is about the size of a credit card.

"Case represents an evolution for bitcoin users who buy, sell and use bitcoin," says Case CEO Melanie Shapiro. "Since bitcoin is used just like cash, it is imperative to incorporate multi-signature security with greater simplicity and ease-of-use to ensure widespread consumer adoption."

MOBILE

Nok Nok Labs integrates S3 with Android M

Nok Nok Labs, a founding member of the FIDO Alliance, has integrated its S3 Authentication Suite with the recently unveiled Google Android M Developer Preview.

When integrated into a mobile app running on Android M, the Nok Nok solution will use the new Fingerprint API and the FIDO Universal Authentication Framework (UAF) protocol to authenticate the user to the mobile app.

NTT Docomo implements fingerprint and iris biometrics

Japan's largest mobile carrier NTT Docomo is driving biometrics into the mobile sector. It is to adopt and implement the Qualcomm Snapdragon Sense ID 3D fingerprint biometrics platform. The platform, supported in the Qualcomm Snapdragon 810 processor, began to be used alongside third party biometric sensors for Docomo's mobile biometric authentication service on 27 May in Japan.

The Docomo service including 'docomo ID login authentication and carrier billing pay-

ment' will help provide Docomo customers with improved and enhanced security, as well as ease of authentication when making mobile payments and accessing Docomo's content and services.

In addition, NTT Docomo's newly-launched Arrows NX F-04G handset, made by Fujitsu, comes with iris-scanning technology to allow access only to the user or make mobile payments reports *International Business Times*.

Docomo said the Arrows NX F-04G, which is Android-based, will be the world's first commercially available smartphone with the feature. Docomo chief executive Kaoru Kato demonstrated making an online pizza order by looking at the phone. The scan's accuracy improves each time a person uses the feature.

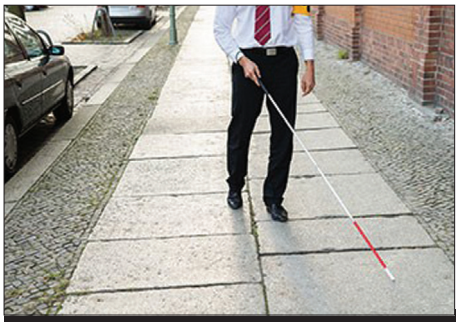
Docomo has selected the NNLTM S3 Authentication Suite to deliver simple and strong authentication to Docomo customers who can now access online services from Docomo and other companies using biometric authentication such as fingerprint-sensors and iris recognition from FIDO-enabled smartphones recently announced by Sharp, Fujitsu and Samsung.

- This comes as Samsung released improved fingerprint recognition for the Galaxy S6.

Smart cane enables blind people to identify people using facial recognition

Birmingham City University researchers have developed a 'smart' cane enabling blind people to identify friends and family using facial recognition technology.

The 'XploR' mobility cane, being developed by ICT students Steve Adigbo, Waheed Rafiq and Richard Howlett, uses smartphone technology to recognise familiar faces. The cane also features GPS functionality to aid navigation.



'Smart' cane enables blind people to identify friends and family using facial recognition technology.

The students have designed the XploR cane to detect faces up to 10 metres away, vibrating when detecting a recognisable individual from a bank of images stored on an internal SD memory card.

Researchers use brain waves to identify individuals

Researchers at the Basque Center on Brain, Cognition, and Language, Spain and Binghamton University, US have presented a method of using brain waves to identify individuals.

The researchers explain that the brain continually generates electrical potentials representing neural communication. These potentials can be measured at the scalp, creating an electroencephalogram (EEG). The research abstract states: "When the EEG is time-locked to stimulation – such as the presentation of a word – and averaged over many such presentations, the Event-Related Potential (ERP) is obtained. The functional characteristics of components of the ERP are well understood, and some components represent processing that may differ uniquely from individual to individual – such as the N400 component, which represents access to the semantic network.

"We applied several pattern classifiers to ERPs representing the response of individuals to a stream of text designed to be idiosyncratically familiar to different individuals. Results indicate that there are robustly identifiable features of the ERP that enable labelling of ERPs as belonging to individuals with accuracy reliably above chance (in the range of 82–97%). Further, these features are stable over time, as indicated by continued accurate identification of individuals from ERPs after a lag of up to six months." The high degree of labelling accuracy was achieved with the use of only three electrodes on the scalp.

Microsoft wearable with behavioural biometrics?

Microsoft is considering developing a 'wearable emotion detection and feedback system'.

Someone wearing a head mounted display or sensing gadget would be able to 'detect audible and visual behaviours of a subject in a field of view of the device', according to a patent uncovered by *The Wall Street Journal*.

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EVENTS CALENDAR

17–19 August 2015
New York, US
Speechtek 2015
SpeechTEK 2015 is aimed at anyone who wants to learn about deploying speech technology for business applications.
More information: http://www.speechtek.com/2015/

7–8 September 2015
Darmstadt, Germany
EAB Research Projects Conference 2015
The EAB Research Projects Conference 2015 is funded by the European Commission. Biometrics and Identity Management are key research topics that are investigated in a number of EU-projects running under the seventh Framework programme and the new Horizon 2020. International research is dealing with innovative solutions for secure and privacy compliant biometrics and federated identity management. The EAB and EU-projects in the field like FIDELITY, FastPass, BEAT, Future-ID, INGRESS, PIDaaS, ABC4EU are jointly organising the research project conference to present research results and to discuss the benefit of this research for European society.
More information: http://www.eab.org/events/upcoming_events.html?ts=1432654694182

8–11 September 2015
Washington DC, US
IEEE Seventh International Conference on Biometrics: Theory, Applications and Systems (BTAS 2015)
The IEEE Seventh International Conference on Biometrics: Theory, Applications and Systems (BTAS 2015), is a a continuation of the BTAS conference series started in 2007. BTAS 2015 is a research conference focused on all aspects of biometrics. It is intended to have a broad scope, including advances in fundamental signal processing, image processing, pattern recognition and statistical and mathematical techniques relevant to biometrics.
More information:
http://www.btas2015.org/Home.html

9–11 September 2015
Washington DC, US
BORDERPOL International Security Meeting - Curtailing Terrorist Travel
BORDERPOL's purpose is to support border agencies worldwide to develop fast, safe and secure borders, focusing on terrorist travel. This BORDERPOL meeting will look closely at these issues with border government representatives from around the world, the private sector and major international organisations providing high value knowledge about and solutions to these complex issues.
More information: http://www.borderpolamericas.com

13–15 October 2015
Westminster, London, UK
Biometrics 2015
The three-day conference offers practical advice, tips and solutions for using biometric technology for managing identity and increasing efficiency within government and commercial applications. The exhibition on 14-15 October is a key source of advanced identity management and authentication solutions.
More information:
http://www.biometricsandidentity.com