

# **BIOMETRIC SUMMIT NEW YORK 2019**



























As a leading provider of solutions for biometric identification and authentication, Aware offers biometric systems built on granular software component products for fingerprint, face, iris, and voice enrolment and matching; mobile liveness detection and authentication; an ABIS with forensic face and fingerprint examination applications; and a biometric services platform. The company has provided government-grade biometric software products and solutions since 1992. More recently it has been leveraging its products for private-sector applications, such as for mobile biometric authentication in financial services and enterprise security. We spoke to David Benini, Vice President of Marketing & Product to find out more about Aware and the company's vision for the future.



#### What changes are you expecting to see over the coming year?

We have seen facial recognition algorithm performance improve substantially in recent years, as noted by NIST recently. Looking forward, we expect to see a similar trajectory for attack detection approaches and algorithms. The result will be vastly improved usability and performance in terms of matching and attack detection performance for mobile authentication. This will drive further adoption for customer and employee facing applications, particularly where biometric security features native to the device are insufficient or undesirable for the particular use case.

#### Where are you seeing the greatest demand for biometrics?

Aware is seeing continued demand in our traditional markets, particularly where government agencies must update their legacy biometric systems and improve their connectivity. We are seeing the most growth in demand for authentication solutions, both for financial services and for enterprise security.

#### What's the most exciting innovation you're seeing in biometric technology?

Machine learning has had a massive impact on facial recognition and attack detection algorithm performance, which has made facial biometrics an ideal approach for newer use cases such as mobile authentication. It's hard to overestimate its impact on the growth of the potential market for biometric solutions.

Standards continue to be critical to the industry. FIDO has also been a critical catalyst for biometrics gaining a foothold for authentication applications. The standards have been expertly crafted and adoption is beginning to ramp.

Looking forward a bit, we are in early stages of adoption of decentralized, self-sovereign identity models that utilize digital credentials and claims. This is an exciting area to watch.

#### From your perspective, how will Machine Learning augment biometric technology solutions?

Machine Learning will continue to drive improvements in performance of algorithms for voice and facial matching and attack detection. These in turn improve usability, which is the biggest driver of adoption.

### For those looking to deploy biometric technology in their organization, or in their products, what are the key things that you would advise them to consider?

Biometric algorithms can be very difficult to test and compare, in part due to the large amount of data that is needed and the challenges around replicating realistic conditions and a breadth of attack modes. Fortunately, organisations like FIDO are beginning to define performance requirements, and a few labs are now providing certification services. Without decades of algorithm testing work done by NIST, the world would be largely in the dark about how biometric matching algorithms actually behave and perform.

But organizations should avoid outsourcing their algorithm assessment efforts completely. Those that do what they can to perform their own testing with their own data benefit greatly from learning where the performance boundaries lie for their own specific use case. Every biometric algorithm has a unique personality that is hard to truly know without a hands-on approach.



#### Biometrics Software and Solutions

Find out more about Aware's Knomi<sup>™</sup> for mobile biometric authentication

- Face, voice, & keystroke dynamics
- NIST-tested algorithms
- · Robust attack detection









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Thank you for joining us today, we hope you enjoyed this unique event and that you'll join us again later this year at Biometric Summit London 2019 on Wednesday 20 November at Rise London where we'll be extending our focus on innovation to include new sessions and engagement on biometrics for Digital Identity and Electronic Know Your Customer (eKYC).

Find out more and register at www.goodeintelligence.com/london-2019/



