Aculab's advanced speech processing team

History

Aculab has been involved in digital voice signal processing technology since 1978, when the company was formed. In the two decades spanning the millennium, Aculab introduced a number of industry firsts involving digital signal processing (DSP) boards, its Prosody and Prosody X families being the innovative products for which it is most known.

Since the mid-1990s, the company has been involved in R&D in advanced speech technologies, including text-to-speech (TTS) conversion or speech synthesis, automatic speech recognition (ASR), and speaker verification and identification (SVI). Those research areas encompass the most advanced aspects of speech signal technology, making Aculab's involvement a natural progression, in line with its expertise.

Today, subsequent to the introduction of Prosody S and Aculab Cloud, Aculab's focus has evolved and broadened to include even more advanced software. In line with that shift and making full use of its speech signal processing expertise, Aculab has expanded its voice biometrics portfolio to release VoiSentry, a multi-tenant SVI system with integrated multi-factor authentication (MFA).

The team

Aculab's advanced speech processing team includes experts with Doctorates in speech signal processing and related technologies. The team includes members of professional bodies: IET; IEEE; ISCA; and the British Association of academic Phoneticians (BAAP). Collectively, they have over 180 years of experience in that area. The advanced speech processing team includes specialists in voice biometrics and speech analysis, processing and recognition, as well as analysis of 'big data', machine learning and artificial intelligence.

Our team has extended biometric analysis techniques, creating the potential for advances in telehealth and speech therapy applications; those include analysis of speech due to health-related issues such as Parkinson's Disease, Spasmodic Dysphonia, FOXP2 gene mutation, Autism, Dysarthria, and Dyspraxia, etc.

Members of the team have worked in academia (including the universities of Oxford and Sheffield) and industry (including BT, Canon, and the Defence Research Agency), working on projects in fields such as linguistics, phonetics, ASR, automatic speaker verification (ASV), and related areas. Those projects included large-scale, multinational collaboration with leading research centres in Europe and the USA, including MIT, KTH, UPenn, CPK, and many others. The team has published extensively, including books and many papers in respected international journals and conferences.

The team is also regularly involved in reviewing for a number of academic journals (Speech Communication, Computer Speech and Language, International Journal of Speech Technology), and major international conferences (ICASSP, INTERSPEECH, SIGDIAL).

Professional services

Aculab's professional services team offers expert assistance in a number of areas, to help customers successfully deploy VoiSentry. Aculab's skilled consultants are available to assist customers in achieving their business goals through using voice biometrics.

Technical support

Aculab's technical support team is accessible to all VoiSentry customers. The support entitlement is inherent in the annual software licence subscription and provides access to the help desk for routine matters, expert assistance for application and API queries, and software assurance.