NEC's Facial Recognition Technology Achieves First Place in the Still-Face Dataset

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Japan's NEC Corp. announced today that its face recognition technologies ranked number one in the Still-Face Dataset of the Multiple Biometric Grand Challenge (MBGC) carried out by the National Institute of Standards and Technology, commissioned by the U.S. Department of Homeland Security.

The facial images evaluated by the Still-Face Dataset were taken by high resolution digital cameras under a variety of challenging conditions, including compressed images used for IC passports, and images taken under poor indoor lighting or direct sunlight. These situations were designed based on anticipated real-world scenarios, and test results have demonstrated high quality performance.

NEC's False Acceptance Rate of 2.1% and False Rejection Rate of 0.1% far outperformed competing technologies in the same category.

NEC's recognition rate algorithms, such as the "multiple face comparison method" and "perturbation space method" have been achieving highly accurate results since they first became commercially available through NEC NeoFace products and technologies in 2002. NeoFace, developed by NEC's Central Research Laboratory, extracts personal characteristics under a range of conditions, including different lighting and viewpoints.

This vendor evaluation project organized by NIST helps promote research and development, along with early adoption, of technologies to

help combat a diverse range of hard to solve crimes. U.S. agencies such as U.S. Department of Homeland Security; U.S. Department of Justice; the FBI; and U.S. Department of Defense have sponsored and supported this project. The results are highly influential on the market.

NEC has been taking part in the development of fingerprint matching technologies for 40 years and facial recognition technologies for 20 years. In terms of NIST evaluations, NEC has been awarded first place ranks in speed and accuracy for various fingerprint, palm print, and partial print matching technologies since 2004 in addition to this newly earned first place facial recognition ranking.

NEC's facial recognition technologies have been adopted in Japan and around the globe-including in countries such as Hong Kong and Chile-for police solutions, immigration systems, and amusement parks. With this recent result from NIST, NEC will continue to promote and deliver biometrics solutions worldwide.

  More information: For further information on the results, please visit NIST website at: face.nist.gov/mbgc/mbgc_presentations.htm

Source: NEC

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