

# *Biometric Consortium 2006 Conference*

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**Topic:** Using Biometric Verification to Estimate Identification Performance

**Abstract:** We show how to estimate identification performance for arbitrary gallery size from an ROC curve. The method presented can: (1) estimate an alarm curve; (2) give rank 1 dependence on gallery size; and (3) estimate a CMC curve. We show that the method assumes consistently normalized scores, with normalization the degree of freedom defining the connection between identification and verification. A measure to quantify normalization consistency is defined. Examples are given using both fingerprint and face databases. Further examples are based on the results given in the FRVT 2002 evaluation report.

**Biography:** Jens Hube is a senior principal research scientist at Identix, where he has worked for over 6 years. He has worked on a variety of biometric research topics including face matching, face quality assessment, score normalization, and surveillance. Additional work on applied biometric projects include the design of face verification stations and surveillance capture systems. He is currently working on the problem of biometric score fusion.

Prior to his work at Identix Mr. Hube was a quantitative analyst in the financial industry. He received his BA in physics from Wesleyan University and an MS in physics from the Pennsylvania State University.