

# *Biometric Consortium 2005 Conference*

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**Topic:** Biometric System Threats and Countermeasures: A Risk Based Approach to Assessment

**Abstract:** Increasing performance rates, growing societal acceptance; The market for biometric systems is growing and the prospects seem to be bright. But, similar to other security technologies, there is a need for realistic assessment of potential risks brought by the increased deployment. Currently, the opinions regarding the deployment of biometrics authentication in large scale Web based systems range from highly skeptical to exceedingly optimistic. In this presentation we discuss a broad range of potential security threats pertinent to biometric authentication and outline a risk assessment methodology that prioritizes the development of the countermeasures.

**Biography:** Dr. Bojan Cukic is an associate professor of Computer Science and Engineering at West Virginia University. He serves as a co-director of CITEr, Center for Identification Technology Research. CITEr is a National Science Foundation Industry / University Research Center focusing on biometric identification technology. He also leads biometrics and information assurance curriculum at WVU.

His research interests include software engineering for high assurance systems, fault-tolerant system architectures, computer security and biometrics. The themes of his biometrics research are multimodal systems, testing and evaluation, and design principles needed for building large scale applications. He is the co-author of MUBI, a freely available software tool for performance prediction of multi-biometric systems. Dr. Cukic and his students currently investigate the impact of biometric error rates in the design of point-of-entry systems, scale-up analysis, the algorithms for the generation of synthetic iris and cryptographic protection of biometric test databases.

Dr. Cukic co-authored more than 100 peer-reviewed publications. He is the recipient of a National Science Foundation CAREER award and a Tycho Brahe Award for research excellence from NASA Office of Safety and Mission Assurance.

Dr. Cukic received a Bachelor of Science in Computer Engineering from the University of Ljubljana, Slovenia, and MS and Ph.D. degrees in Computer Science from the University of Houston, TX.