

Ileana R. Buhan

CONTACT INFORMATION

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Date of Birth: 14.03.1979

CITIZENSHIP

Romanian

RESEARCH INTERESTS

Biometric Template Protection, Coding Theory and Cryptography; Secure Spontaneous Device Interaction; Usability and Security;

EDUCATION

- PhD Student, Twente University, The Netherlands
(expected submission date: June 2008)
Thesis Title: Cryptographic Keys from Noisy Data: Theory and Applications
Promotor: Prof. Pieter Hartel
Assistant-Promotor: Dr. Raymond Veldhuis
Area of Study: Security with Noisy Data
- M.S., Department of Computer Science and Mathematics, North University of Baia Mare, Romania
Thesis: Statistical Tests for Pseudorandom Sequences
Ranked second out of 15;
- B.S., Department of Computer Science and Mathematics, North University of Baia Mare, Romania
Thesis: Wavelet Transformation for Image Compressions
Ranked among top 4 out of 50;

AWARDS

- University Scholarship, Department of Computer Science and Mathematics, North University of Baia Mare, Romania 1997-2001;
- 3rd prize in Mathematics Olympics (regional level);

EMPLOYMENT HISTORY

- PhD Student, Twente University, Distributed and Embedded Security research group
November 2004 to present
SecureGrip project, STW funded
Supervised 2 bachelor students and 1 master student;
- Teaching Assistant, North University of Baia Mare
December 2001-October 2004
Permanent position;
Grading practical assignments for courses Algorithms and Programming (first and second year students), Computer Graphics (third year students), Statistics and Probability (masters course);

WORKSHOP ORGANIZATION "Workshop on Fundamentals of Template Protection"
30 January 2008, Natlab Philips, 16 participants

REFEREING ACTIVITY CARDIS(2008, 2006), ESORICS (2008,2007,2006), WISSEC(2008,2007)

LANGUAGES

Romanian, Hungarian (Native);
English (V. Good);
Dutch (Beginner-want to improve);

PUBLICATIONS LIST

Journal

2009

Ileana Buhan, Bas Boom, Jeroen Doumen, Pieter Hartel, Raymond Veldhuis, *Secure Ad-hoc Pairing with Biometrics: SAfE*, International Journal of Security and Networks Special (IJSN) Special Issue on Secure Spontaneous Interaction; Vol 4(1):to appear, Editors: R. Mayrhofer, K. Nyberg, and T. Kindberg

Conferences (refereed)

2007

- Buhan, I.R. and Doumen, J.M. and Hartel, P.H. and Veldhuis, R.N.J. (2007) Fuzzy extractors for continuous distributions. In: Proceedings of the 2nd ACM Symposium on Information, Computer and Communications Security (ASIACCS), 20-22 March 2007, Singapore. pp. 353-355. ACM. ISBN 1-59593-574-6 (Acceptance Rate: 17.6%)
- Buhan, I.R. and Doumen, J.M. and Hartel, P.H. and Veldhuis, R.N.J. (2007) Feeling Is Believing: A Secure Template Exchange Protocol. In: Advances in Biometrics, International Conference (ICB), 27-29 Aug 2007, Seoul, Korea. pp. 897-906. Lecture Notes in Computer Science 4642. Springer Verlag. ISBN 978-3-540-74548-8 (Acceptance Rate: 24.2%)

2006

- Buhan, I.R. and Bazen, A.M. and Hartel, P.H. and Veldhuis, R.N.J. (2005) A False Rejection Oriented Threat Model for the Design of Biometric Authentication Systems (Poster Paper). In: 2nd Int. Conf. on Biometrics (ICB), Hong Kong, China. pp. 728-736. Lecture Notes in Computer Science 3832. Springer-Verlag. ISBN 3-540-31111-4 (Acceptance Rate: 25.4%)

Workshop(not refereed)

2007

- Buhan, I.R. and Doumen, J.M. and Hartel, P.H. and Veldhuis, R.N.J. (2007) Secure Ad-hoc Pairing with Biometrics: SAfE. In: First International Workshop on Security for Spontaneous Interaction, 16. September 2007, Innsbruck, Austria. pp. 450-456. Ubicomp 2007 Workshop Proceedings. ISBN 978-3-00-022599-4
- Buhan, I.R. and Doumen, J.M. and Hartel, P.H. and Veldhuis, R.N.J. (2007) A unifying view on template protection schemes. In: Proceedings of the 28th Symposium on Information Theory in the Benelux, 24-25 May 2007, Enschede, The Netherlands. pp. 35-42. Werkgemeenschap voor Informatie- en Communicatietechniek. ISBN 978-90-365-2509-1

Under Review

- Buhan, IR, Doumen J, Hartel P. *Controlling Leakage of Biometric Information using Dithering* to EUSIPCO special track on “Signal Processing in the Encrypted Domain”, ACM
- Buhan, IR Doumen,J Hartel, P Veldhuis, RNJ Tao, Q *Embedding Renewable Cryptographic Keys into Continuous Noisy Data* to CRYPTO, Springer

REFERENCES

upon request