

Dr. Alina Olteanu

Curriculum Vitae

Department of Biology, Chemistry, Mathematics and Computer Science
210 Harman Hall, University of Montevallo, AL 35115
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EDUCATION

Doctor of Philosophy in Computer Science, 2009

Dissertation: "Network Security: Design, Analysis and Tradeoff Evaluation"
The University of Alabama, Tuscaloosa, AL

Master of Science in Computer Science, 2007

The University of Alabama, Tuscaloosa, AL

Master of Science in Applied Mathematics, 2005

Thesis: "Elements of Nonlinear Programming"
Polytechnic University of Bucharest, Bucharest, Romania

Bachelor of Science in Computer Science, 2003

University of Bucharest, Bucharest, Romania

TEACHING

Assistant Professor of Computer Science, 2019-

University of Montevallo, Department of Biology, Chemistry, Mathematics and Computer Science

Courses taught:

- CS 161 Introduction to Computer Science
- CS 170 Computer Programming I
- CS 270 Computer Programming II
- CS 280 Algorithm Development
- CS 311 Object Oriented Design
- CS 364 Web Development
- CS 315 Software Engineering
- CS 320 Database Management Systems

Assistant/Associate Professor, 2011-2014

Spiru Haret University, Department of Mathematics and Computer Science, Bucharest, Romania

Courses taught (selection):

- Programming and Algorithms
- Object Oriented Programming
- Computer Networking

Graduate Teaching Assistant, 2005-2007

The University of Alabama, Department of Computer Science, Tuscaloosa, AL

Courses taught: CS 102: Microcomputer Applications

Computer Science Tutor for Student-Athletes, 2008

The University of Alabama, Athletic Academic Programs, Tuscaloosa, AL

Courses tutored (selection):

- CS 205: Advanced Web Design with JavaScript
- CS 285: Computerized Management Information Systems
- CS 466: Information Systems

INDUSTRY EXPERIENCE

Software Developer III Enterprise, 2016-2019

UAB Health Systems, Birmingham AL

Senior Software Engineer / Software Consultant, 2014-2016

NWN Corp, Doozer Software, Birmingham, AL

Software Consultant, 2009-2011

Computer Technology Solutions, Birmingham, AL

SERVICE, LEADERSHIP, COMMITTEES and PROFESSIONAL ASSOCIATIONS

- UM representative to the Computer Science Preprofessional Academic Committee (PAC), 2021-
- Participant in the COPLAC Grant Affinity Group for Computer Science, 2021
- Member of IEEE Computer Society, 2021-
- Coordinator of the Computer Science Program, 2020-
- Initiator of CS curriculum, of several marketing materials and talks in support of the CS program, 2019-
- Major advisor to Computer Science majors, 2020-
- Member of the Academic Support Subcommittee at UM, 2020-
- Member of the Concert Lecture Committee at UM, 2020-
- Member of the Digital Communication Committee at UM, 2019-2021
- Member of the faculty search committee for Computer Science, 2020-2021
- UM faculty representative for NCWIT Academic Alliance, 2019-
- Member of the editorial board of ISRN Sensor Networks Journal, 2012-2014
- Member of the technical committee for the 6th International Workshop on Sensor Networks (SN 2013)
- Grant Evaluator for the Romanian National Council of Scientific Research, 2012 and 2014
- Member of UPE National Honor Society for Computer Science, 2008-
- Member of Golden Key International Honor Society, 2008-
- Reviewer for several journals and conferences (selection): IEEE Transactions on Network Science and Engineering (TNSE), ISRN Sensor Networks, Wiley Journal of Security and Communication Networks (SCN), EURASIP Journal on Wireless Communications and Networking (EURASIP JWCN), International Journal of Communication Systems (IJCS), International Journal of Pervasive Computing and Communications (IJGCC)

AWARDS

Outstanding Dissertation Award Nominee, 2010

Department of Computer Science, The University of Alabama

W4-Net Best Researcher Award, 2009

For contributions to high quality research in security analysis, security modeling, and tradeoff analysis of security and performance
The University of Alabama

Outstanding Research by a Doctoral Student Award, 2009

Department of Computer Science, The University of Alabama

Graduate Student Research and Travel Support Award, 2009

The University of Alabama

Graduate Student Research and Travel Support Award, 2008

The University of Alabama

CERTIFICATIONS

Cisco Certified Network Associate (CCNA), Module 1, 2012

Cisco Networking Academy

Oracle Certified Professional Java 6.0 Programmer (OCPJP), 2011

Oracle Certification Program

Java Certified Programmer, 2004

Cisco Systems, Bucharest, Romania

PUBLICATIONS

- **A. Olteanu**, Y. Xiao, J. Liu, T.M. Chen, and C.L.P. Chen, "Non-intrusive Tracing in the Internet," (Wiley Journal of) Security and Communication Networks, 10.1002/sec.616, 2012.
- **A. Olteanu**, Y. Xiao, F. Hu, B. Sun, and H. Deng, "A Lightweight Block Cipher Based on a Multiple Recursive Generator for Wireless Sensor Networks and RFID," Wireless Communications and Mobile Computing (WCMC), John Wiley & Sons, Vol. 11, Issue 2, pp. 254-266, 2011.
- **A. Olteanu** and Y. Xiao, "Security Overhead and Performance for Aggregation with Fragment Retransmission (AFR) in Very High-Speed Wireless 802.11 LANs," IEEE Transactions on Wireless Communications, Vol. 9, No. 1, pp. 218-226, 2010.
- **A. Olteanu**, Y. Xiao, K. Wu, and X. Du, "Weaving a Proper Net to Catch Large Objects in Wireless Sensor Networks," IEEE Transactions on Wireless Communications, Vol. 9, No. 4, pp. 1360-1369, 2010.
- **A. Olteanu**, Y. Xiao, J. Liu, and T.M. Chen, "Studying Non-intrusive Tracing in the Internet," Proceedings of ICST QShine 2010.
- **A. Olteanu**, Y. Xiao, and Y. Zhang, "Optimization between AES Security and Performance for 802.15.3 WPAN," IEEE Transactions on Wireless Communications, Vol. 8, pp. 6030-6037, 2009.

- **A. Olteanu** and Y. Xiao, "Fragmentation and AES Encryption Overhead in Very High-Speed Wireless LANs," Proceedings of IEEE ICC, pp. 1-5, 2009.
- **A. Olteanu**, Y. Xiao, K. Wu, and X. Du, "An Optimal Sensor Network for Intrusion Detection," Proceedings of IEEE ICC, pp. 1-5, 2009.
- **A. Olteanu**, Y. Xiao, K. Wu and X. Du, "Weaving a Proper Net to Catch Large Objects," Proceedings of IEEE GLOBECOM, pp. 133-137, 2008.
- **A. Olteanu**, Y. Xiao, F. Hu, and B. Sun, "A Lightweight Block Cipher Based on a Multiple Recursive Generator," Proceedings of IEEE GLOBECOM, pp. 1847-1851, 2008.
- P.G. Bradford and **A. Olteanu**, "Issues in Simulation for Valuing Long-Term Forwards," Proceedings of the Third International Joint Conferences on Computer, Information, and System Sciences, and Engineering, pp. 394-398, 2007.

PRESENTATIONS

- "Network Security: Optimal Methods for Detection, Coverage and Encryption," Seminar of Applied and Computational Mathematics, College of Mathematics and Computer Science, Spiru Haret University, March 2013.
- "Weaving a Proper Net to Catch Large Objects," IEEE GLOBECOM AHSN, New Orleans, LA, December 2008.
- "A Lightweight Block Cipher Based on a Multiple Recursive Generator," IEEE GLOBECOM CCNS, New Orleans, LA, December 2008.
- "Issues in Simulation for Valuing Long-Term Forwards," Third International Joint Conferences on Computer, Information, and System Sciences, and Engineering, Bridgeport, CT, December 2007.

GRANTS

- "Computer Science is Fun with Visual Programming", Google grant program "Computer Science for High-School" (CS4HS)", 2014, grant director, \$10,000.
- "Primate-inspired Heterogeneous Mobile and Static Sensor Networks," The U.S. National Science Foundation, CCF-0829827 and CCF-0829828, 2008 to 2011, graduate student collaborator.
- "Error-resistant, Accountable, RFID-assisted Wireless Sensor Networks for Elder Cardiac Tele-healthcare," The U.S. National Science Foundation, CNS-0716211, 2007 to 2011, graduate student collaborator.
- "Accountability at the Wireless Medium Access Control Layer," The U.S. National Science Foundation, CNS-0737325, 2008 to 2010, graduate student collaborator.