# Christopher A. Wood

**Permanent Address**
2000 Post St., Apt. 123
San Francisco, CA 94115

Phone: (315) 806-5939
Email: woodc1@uci.edu
www.christopher-wood.com

## EDUCATION

*Doctor of Philosophy*, Computer Science
University of California Irvine, Irvine, CA — 2013 - 2018 (expected)
Advisor: Dr. Gene Tsudik
GPA: 4.0/4.0

*Master of Science*, Computer Science
Rochester Institute of Technology, Rochester, NY — 2012 - 2013
Advisor: Dr. Stanisław Radziszowski
GPA: 4.0/4.0

*Bachelor of Science*, Computer Science and Software Engineering
Rochester Institute of Technology, Rochester, NY — 2008 - 2012
GPA: 3.98/4.0 (Professional Field of Study GPA: 4.0/4.0)

## SELECTED PUBLICATIONS

C-1. P. Bajorski, A. Kaminsky, M. Kurdziel, M. Lukowiak, S. Radziszowski, and C. Wood, "Stochastic Analysis and Modeling of a Tree-Based Group Key Distribution Method in Tactical Wireless Networks," to appear in *Journal of Telecommunications System & Management, Engineering Journals, OMICS Publishing Group*.

C-2. C. Ghali, G. Tsudik, C. A. Wood, E. Yeh, "Practical Accounting in Content-Centric Networking," *NOMS 2016, IEEE/IFIP Network Operations and Management Symposium*, April 25 - 29, 2016, Istanbul, Turkey.

C-3. G. Tusik, E. Uzun, and C. A. Wood, "AC3N: An API and Service for Anonymous Communication in Content-Centric Networking," in *Proceedings of CCNC 2016*, Las Vegas, NV, USA. January 2016.

C-4. M. Mosko and C. A. Wood, "Secure Fragmentation for Content-Centric Networking," *IEEE MASS 2015 Workshop on Content-Centric Networking (CCN 2015)*, Dallas, TX, USA. October 2015. (Best paper award winner)

C-5. C. Ghali, M. A. Schlosberg, G. Tsudik, and C. A. Wood, "Interest-Based Access Control for Information Centric Networks," in *Proceedings of ICN 2015, the 2nd ACM Conference on Information Centric Networking*, San Francisco, CA, USA. September 2015.

C-6. C. Ghali, A. Narayanan, D. Oran, G. Tsudik, and C. A. Wood, "Secure Fragmentation for Content-Centric Networks," *NCA 2015, the 14th IEEE International Symposium on Network Computing and Applications*, Cambridge, MA, USA. September 2015.

C-7. C. A. Wood and J. Jacob, "Characterization of Small Trees Based on their L(2,1)-Span," *AKCE International Journal of Graphs and Combinatorics*, Volume 12, Issue 1, July 2015, Pages 2631.

C-8. J. Kurihara, C. A. Wood, and E. Uzun, "An Encryption-Based Access Control Framework for Content-Centric Networking," *IFIP Networking 2015*, Toulouse, France. May 2015.

C-9. M. Lukowiak, S. Radziszowski, J. Vallino, C. Wood, "Cybersecurity Education: Bridging the Gap between Hardware and Software Domains," *ACM Transactions on Computing Education*, 14(1) (2014).

C-10. C. A. Wood and E. Uzun, "Flexible End-to-End Content Security in CCN," *IEEE Consumer Communications and Networking Conference (CCNC 2014) Special Session: Information Centric Networking*, Las Vegas, Nevada. January 2014.

## SELECTED TALKS AND PRESENTATIONS

P-1. "Efficient Security Bindings for Information Centric Networks," *CCNxCon 2015, Palo Alto Research Center, Palo Alto, CA*. May 20, 2015.

P-2. "Handling Trust Enforcement," presentation, *CCNxCon 2015, Palo Alto Research Center, Palo Alto, CA*. May 20, 2015.

P-3. "Digital Signatures and Implicit Certificates," guest lecture for Dr. Stanislaw Radziszowski's (CS@RIT), Crypto II course, May 5, 2015.

P-4. "Secure Content Dissemination in Content Centric Networking," *CCNxCon 2013, Palo Alto Research Center, Palo Alto, CA*. September 5, 2013.

## RECENT PROFESSIONAL EXPERIENCE

*Palo Alto Research Center* June 2014 - present
Computer Science Laboratory, Palo Alto, CA Network Software Development Engineer

- Develop the CCNx 1.0 software stack, libraries, and APIs.
- Write IETF RFC drafts for various elements of the CCN protocol.

*Palo Alto Research Center* July 2013 - September 2013
Computer Science Laboratory, Palo Alto, CA Security and Privacy Research Intern

- Researched security and privacy aspects related to content-centric network (CCN).
- Implemented the Green-Ateniese (pairing-based) and Chow-Weng-Yang-Deng (Schnorr- and ElGamal-based) Proxy Re-Encryption schemes in Java for use in a CCNx application.
- Studied and tested various techniques for securing content.

*Intel Corporation* June 2012 - August 2012
Virtual & Parallel Computing Group, Folsom, CA Graphics Software Engineer Intern

- Developed production features for tool that processes hardware specifications to generate web content and source code for VHDL and C/C++ testbeds.
- Interacted with internal customers within the VPG to utilize debug tools and environments for architecture specification and post-silicon testing.

## RECENT ACADEMIC EXPERIENCE

*Advanced Cryptography* May 5, 2015
Guest Lecturer for Dr. Stanisław Radziszowski (CS) (RIT)

- Lectured about digital signature algorithms, ElGamal and ECDSA batch verification techniques, standard public key infrastructures, and the OMC and ECQV implicit certificate schemes.

*Hardware and Software Design with Cryptographic Applications* February 2011 - May 2013
Teaching Assistant and Lecturer for Dr. Marcin Lukowiak (CE) (RIT)

- Developed and delivered lecture material on cryptography, embedded software optimization techniques, the Impulse C high-level synthesis tool, and AES cache timing attacks.

## HONORS AND ACTIVITIES

- NSF GRFP fellowship recipient, 2014
- RIT Honors Program, 2009 – 2013
- RIT Tau Beta Pi Engineering Honors Society, 2011 – 2013
- RIT Outstanding Undergraduate Student award, selected, Winter 2012
- RIT Computer Science MS Student Delegate, selected, Winter 2012
- Recipient of Golisano College Honors research assistantship stipend, Winter 2009/2010
- Recipient of Golisano College Honors research assistantship stipend, Spring 2011
- Recipient of RIT undergraduate research award stipend, Summer 2009
- RIT Golisano College Dean's List, 2008 – 2013