

CV

I. Professional Background

Name: Jeffrey H. Kulick

Rank and Year Appointed to that Rank:

Year of Appointment to Graduate Faculty if applicable:

Department:

Office Address: EB 215

Academic Specialty (ies):

Degrees (include all degrees: bachelors, masters, and doctorate), (include title of degree, year awarded, institution, major, minor, and dissertation title):

II. Teaching Activities: Summary list of courses taught, theses advised

CPE 412, INTRO TO PARALLEL PROGRAMMING, 1 course.

CPE 434, OPERATING SYSTEMS, 1 course.

CPE 435, OPERATING SYSTEMS LABORATORY, 1 course.

CPE 490, ST:OS FOR SAFE, SECURE SYSTEMS, 1 course.

CPE 512, INTRO PARALLEL PROGRAMMING, 2 courses.

CPE 534, OPERATING SYSTEMS, 1 course.

CPE 590, ST:OS FOR SAFE, SECURE SYSTEMS, 1 course.

CPE 656, SOFTWARE ENGRG STUDIO I, 1 course.

CPE 658, SOFTWARE ENGRG STUDIO II, 1 course.

III. Research, Creative, and Scholarly Activity:

(List publications chronologically, by category, including authors, title, journal, volume, page, year published)

1§ Books:

2§ Refereed Journal Articles:

3§ Abstracts and Papers Delivered at Professional Meetings:

4§ Other Publications:

Reece Johnston, Sun-Il Kim, David Coe, Letha Etzkorn, Jeffrey Kulick and Aleksandar Milenkovic "Xen Network Flow Analysis for Intrusion Detection" in 11th Annual Cyber and Information Security Research

Jason D. Winningham, David J. Coe, and Jeffrey H. Kulick, "Agile Systems Integration Process," *2015 Frontiers in Education: Computer Science and Computer*

Engineering (FECS'15), WORLDCOMP 2015, July 27-30, 2015, Las Vegas, NV.

Coe, D. J., Kulick, J. H. (2014). *Positive Train Control: Concepts, Implementations, and Challenges*. Proceedings of The 2014 World Congress in Computer Science, Computer Engineering, and Applied Computing.

Schiavone, S. M., Chambers, S., Patel, S. J., Hanback, L. A., Coe, D. J., Winningham, J., Wells Jr, B. E., Kulick, J. H. (2014). *UAH OnTrack: Precision Navigation System for Research on The Software Safety Issues of Positive Train Control* (pp. 7). Proceedings of The 2014 World Congress in Computer Science, Computer Engineering, and Applied Computing.

5§ Performances:

6§ Exhibitions:

7§ Invited Colloquia, Seminars and Presentations:

8§ Research Grants and Contracts Received: (include agency or foundation, title, dollar amount, time period)

Coe, D. J. (Co-Principal), Gaede, R. K. (Principal), English, J. M. (Co-Principal), Kulick, J. H. (Co-Principal), "RISE - Rapid Immersion into Software Engineering," Sponsored by National Science Foundation, Federal, \$605,875.00. (March 31, 2014 - Present).

Fahimi, F. (Co-Principal), Gaede, R. K. (Principal), Chittur, K. K. (Co-Principal), Farrington, P. A. (Co-Principal), Kulick, J. H. (Co-Principal), Etzkorn, L. H. (Co-Principal), Anderson, M. D. (Co-Principal), English, J. M. (Co-Principal), Coe, D. J. (Co-Principal), "NRT IGE: Rapid immersion into cyber security for engineers," Sponsored by NSF - NRT, Federal, \$496,486.00. (2015 - 2018).

Coe, D. J. (Principal), Kulick, J. H. (Co-Principal), Etzkorn, L. H. (Co-Principal), Fu, Y. (Co-Principal), "Dynamic Verification of Reconfigurable Modular Robotic Systems," Sponsored by Air Force Research Laboratory, Federal, \$1,000,000.00. (September 1, 2014 - August 30, 2017).

Coe, D. J. (Principal), Kulick, J. H. (Co-Principal), Kim, S.-i. (Co-Principal), Etzkorn, L. H. (Co-Principal), "IIDR/ Dielectric: A Lightweight Virtualization Methodology for Insulating Cyber Physical and Cloud Computing Applications from Outside Threats," Sponsored by University of Alabama in Huntsville, University of Alabama in Huntsville, \$49,589.00. (March 31, 2015 - March 31, 2016).

Coe, D. J. (Co-Principal), Joiner, L. L. (Principal), Kulick, J. H. (Co-Principal), "Application of Ultra Wide Band Radars for Improved Railway Operations," Sponsored by Transportation Research Board of the National Academies, \$99,984.00. (September 1, 2014 - August 31, 2015).

Coe, D. J. (Co-Principal), Joiner, L. L. (Principal), Kulick, J. H. (Co-Principal), "Sense and avoid radar system for unmanned aerial systems," Sponsored by Lockheed Martin, Private, \$10,000.00. (August 2014 - May 2015).

Etzkorn, L. H. (Co-Principal), Coe, D. J. (Principal), Kulick, J. H. (Co-Principal), Li, W. (Co-Principal), "NRI:Small:Formal Verification Techniques for Safe,

Reconfigurable Modular Co-Robots," Sponsored by NSF, Federal, \$695,808.00. (May 1, 2012 - April 30, 2015).

Coe, D. J. (Principal), Kulick, J. H. (Co-Principal), Etzkorn, L. H. (Co-Principal), "Formally Verifiable Protection Profiles for Industrial Control Systems," Sponsored by Department of Homeland Security, Federal, \$1,500,000.00. (March 31, 2014 - April 1, 2015).

Coe, D. J. (Principal), Kim, S.-i. (Co-Principal), Etzkorn, L. H. (Co-Principal), Kulick, J. H. (Co-Principal), "Enhancing Security Through the Use of Proven Security Pattern Methodologies," Sponsored by Office of Naval Research, Federal, \$737,696.00. (April 1, 2014 - March 31, 2015).

Coe, D. J. (Principal), Kim, S.-i. (Co-Principal), Etzkorn, L. H. (Co-Principal), Kulick, J. H. (Co-Principal), "Whitepaper - Enhancing Security Through the Use of Proven Security Pattern Methodologies," Sponsored by Office of Naval Research, Federal. (April 1, 2014 - March 31, 2015).

"C/SAIC/Amcom Express/35/9CL/THAAD TEC Software and Engineering Support," Sponsored by SAIC/HSV, Federal, \$19,159.09. (September 30, 2013 - September 26, 2014).

Etzkorn, L. H. (Supporting), Kulick, J. H. (Principal), "Model Driven Software Engineering for THAAD," Sponsored by U.S. Army/AMRDEC, Federal, \$50,000.00. (January 2014 - August 2014).

Etzkorn, L. H. (Co-Principal), Gregory, J. C. (Principal), Coe, D. J. (Co-Principal), Kulick, J. H. (Co-Principal), "Model-Based Design and Formal Verification Methodologies to Assure Development of Safe and Resilient Complex Systems," Sponsored by NASA EPSCoR, Federal, \$224,683.00. (May 1, 2012 - April 30, 2014).

IV. Service Activities (include service to institution, profession, discipline, other):

Committee Member, computer engineering technical committee. (September 2014 - September 2015).

Committee Chair, faculty search committee. (August 2014 - May 2015).

V. Honors, Awards, and Special Recognitions: