Final Report of the ACM/IEEE/AIS/IFIP Joint Task Force on Cybersecurity Education

TREO Talk Paper

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Abstract

The Joint Task Force (JTF) on Cybersecurity Education (http://cybered.acm.org/) was launched in September, 2015 as a collaboration between major international computing societies: Association for Computing Machinery (ACM), IEEE Computer Society (IEEE CS), Association for Information Systems' Special Interest Group on Security (AIS's SIGSEC), and International Federation for Information Processing Technical Committee on Information Security Education (IFIP WG 11.8). The JTF grew out of the foundational efforts of the Cyber Education Project (CEP) (http://www.cybereducationproject.org/). The purpose of the JTF on Cybersecurity Education was to develop comprehensive model curricular recommendations for undergraduate program in cybersecurity education that will support future program development, and associated educational efforts. Prior ACM-lead JTFs that have worked to produce model curricula recommendations (www.acm.org/education/curricula-recommendations) for undergraduate degree programs, included:

- The ACM/IEEE CE2004 for Computer Engineering
- The ACM/AIS IS2010 for Information Systems
- The ACM/IEEE CS2013 for Computer Science
- The ACM/IEEE SE2014 for Software Engineering
- The ACM/IEEE IT2017 for Information Technology (under development)

Similarly, this JTF has been working to achieving the proposed curricular guidelines for undergraduate degree programs in cybersecurity, CSEC 2017, which was endorsed by the AIS Council and published in December, 2017. This presentation will start with an overview of JTF that will include discussion about the JTF members, related groups, operations, and timeline. Following, a more detailed discussion will be provided on the work that the JTF has been conducting, and the current Working Groups (WGs) activities, including the thought model using the cross-cutting ideas, the knowledge areas, knowledge units, and topics developed thus far. Following, a discussion will be provided about the final report itself, the recommendation usage of the CSEC 2017 curricular guideline, issues related to the scope of the field of cybersecurity, along with challenges of defining the program outcomes. Discussion about the opportunities to be engage in the Exemplary Programs option of the on-going part of this project will be provided. Finally, the talk will conclude with an open dialogue with the attendees on topics related to the work of the JTF on Cybersecurity Education.