Do Attack/Defend Exercises Belong In the Classroom?

Deborah A. Frincke
Panel Chair
Dept of Computer Science
University of Idaho
Moscow, Idaho 83844-1010
(208) 885-6501 [phone]
(208) 885-9052 [fax]
frincke@cs.uidaho.edu

Description:

The issue of ways and means to enhance the teaching of security objectives has received increasing attention nationally. In particular, the 1998 Workshop on Security Education concentrated on the use of laboratory activities to enhance educational objectives.

Many instructors currently use attack/defend exercises as learning tools in the classroom. Some implementations involve students defending systems from "attacks" by instructors, while others allow students to simultaneously defend and attack one another's systems. Still others require students to design systems which are then subjected to attacks. These attack/defend exercises are thought to be beneficial, since they provide hands-on experience, encourage creative thinking, and are highly motivating to students. However, there are many underlying issues that should be considered, ranging from the pragmatics of managing such exercises in a classroom setting to concerns about the educational objectives of such assignments. In this panel, we bring together educators and practitioners to explore the issues, aims, and educational value of attack/defend exercises in a classroom setting.

Panelists:

Deborah Frincke, PhD (chair) University of Idaho (info above)

Matt Bishop, PhD
Dept of Computer Science
University of California, Davis
Davis, CA 95616-8562
916 752 4767
fax: 916 752 4767
bishop@cs.ucdavis.edu

Cynthia Irvine, PhD
Comp Sci Department
Naval Postgraduate School
Monterey, CA 93943-5118
408 656 2451
fax: 408 656 2814
irvine@cs.nps.navy.mil

Ira Winkler
NCSA
35 Sunset Dr.
Severna Park, MD 21146
410 544 3435
fax: 410 544 1404
winkler@ncsa.com

Derek Simmel
CERT

Jim Davis, PhD
Iowa State University
Dept of Electrical and Computer Engineering
Ames, Iowa 5011
515 294 0659
[fax] 515 294 8432
davis@iastate.edu

Willis Marti
Texas A&M University
Computer Science
409 845 1293
[fax] 409 847 8578
willis@cs.tamu.edu