Field Trip # 35	**Ethical Hacking**
Developed by:	Todd McDonald
Subject:	Ethical Hacking
Short description:	This is an NSF-sponsored hands-on learning activity where students with some knowledge of computers and programming can gain deeper insight into software security
Educational Level:	11^{th} – 12^{th} Grade
Field trip type:	Workshop
Educational Outcomes:	The Student will be able to: • Understand the consequences of illegal hacking • Differentiate between ethical and unethical hacking • Compute and understand binary and hexadecimal numbers • Explain the goals of a reverse engineer • Define a man-at-the-end (MATE) attack • Use a dynamic analysis tool to understand and reverser engineer a program
Content:	The topic focuses on both illegal and ethical uses of hacking and will highlight the negative and illegal consequence of malicious hacking. Students will learn how software can be analyzed to change its intended behavior and learn concepts related to penetration testing and securing software from attack.
Notes to instructor:	