UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO

SANTA BARBARA • SANTA CRUZ

ACADEMIC TALENT DEVELOPMENT PROGRAM
GRADUATE SCHOOL OF EDUCATION
70 UNIVERSITY HALL # 1160
BERKELEY, CA 94720-1160

PHONE 510-642-8308
FAX 510-642-0510
EMAIL atdpoffice@berkeley.edu
http://atdp.berkeley.edu

atdp
ACADEMIC TALENT DEVELOPMENT PROGRAM

2014 SECONDARY DIVISION – FINAL EVALUATION OF STUDENT

STUDENT: Samuel, Mingwei
COURSE: 3436 Computer Security
INSTRUCTOR(S): Abraham Liao
GRADE IN COURSE: A+
RECOMMENDED CREDIT: 5 units
ATTENDANCE: 0 absences, 0 tardies

PERFORMANCE IN THE FOLLOWING AREAS:

Labs: 100%
Homework: 100%
CTF: 100%

COURSE DESCRIPTION AND INFORMATION:

This face-paced course surveyed popular topics in computer security, including cryptography, it's applications, strengths, and weaknesses, network security and infrastructure, reverse engineering, software and operating system security, and how they affect our personal lives and society at large. Students were introduced to these topics through a combination of programming assignments, lectures, and reading. The final events of the course were two virtual capture the flag (CTF) games where students had to find exploits in several services written in Python (source provided) and C (binary analysis).

COURSE TEXT(S):

None

INSTRUCTOR'S NARRATIVE OF STUDENT PERFORMANCE:

Mingwei entered the class as an experienced programmer with a strong background in Linux as well, and his skillset allowed him to excel at all the topics that we covered this summer. An active participant in class, he often asked great questions during lecture that yearned for a deeper understanding of topics that we were sometimes only meant to survey. With his prior experience, he easily completed the first week's programming and Linux command line assignments. This carried onto other topics, as he powered through the cryptography lab assignments and was often the first to finish. He did well at the C/reverse engineering/binary analysis portions of the course, often successfully reverse engineering the given programs (no source code provided) without any additional guidance. In our individual capture the flag (CTF) competition, Mingwei did not win, but that was due in large part to the fact that he spent a lot of time developing an automated exploit/scoring system – had the game run longer, I'm confident that he would have won, as he had exploited six of the eight services by the time the game ended, which was more than anyone else. Mingwei wrote a bulk of the custom service for the second CTF team game, and I applaud his implementation of the service. It was an absolute pleasure having Mingwei in my course, and I hope he continues to pursue the field, where he has shown a lot of talent.