HELPING FIGHT COMPUTER CRIME
the MISUSE PROBLEM

SPRING '07 ~ iPROM team 311

Background
Misuse vs. Intrusion

Problem
- Computer misuse is much more rampant than intrusion
- No existing proactive commercial software
- $178 billion per year cost
- No current way to test automated misuse detection

Solution
- Develop dataset generation tools
- Create human-generated dataset for testing
- Build misuse detection prototype
- End Solution: detect misuse in real time

Procedure
- Break team into subteams
- Create data collection software
- Collect data (ran queries)
- Build data analysis software
- Analyze data

Results
- 11.8 GB data set
- 168 user reports from 12 individual profiles
- 4,552 total minutes recorded
- 1,339 queries
- 5,308 webpages inspected
- 95,419 keystrokes logged
- Basic misuse detection algorithms implemented on data set with accuracy of 80%
- Operating System stats

Team
Alana Platt (Project Leader)
Graduate ~ Computer Science
Jordan Wittering (Graduate Advisor)
Graduate ~ Computer Science
Dr. David Groisman (Faculty Advisor)
Computer Science
Dr. Nazli Golnarizadeh (Faculty Advisor)
Computer Science
Bill Alton
Sophomore ~ Computer Science
Young Cho
Senior ~ Applied Mathematics
Justin Chong (Design Team Leader, Graphics Production)
Sophomore ~ Mechanical Engineering
Matt Holmes
Senior ~ Computer Information Systems
Daniel Hyo (Web Designer & Brochure Team Leader)
Senior ~ Computer Science
Heebyeol Jeong (Statistical Analysis & Print Content)
Senior ~ Electrical Engineering
Jimign Lim (Query Processing)
Senior ~ Electrical Engineering/Applied Mathematics
Mark Malanowski
Junior ~ Computer Science
Yoon Nadji
Sophomore ~ Computer Science
Peter Niedbalski
Junior ~ Biology
Gerardo Sanchez
Senior ~ Civil Engineering
Jason Soo
Sophomore ~ Computer Science

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iPRO day
Jan. 21 Jan. 28 Feb. 4 Feb. 11 Feb. 18 Feb. 25 Mar. 4 Mar. 11 Mar. 18 Mar. 25 Apr. 1 Apr. 8 Apr. 15