The Road to the DC3 Challenge

Wilmington University

Mark J. Hufe

Objectives

- Who is Wilmington University?
  - Cyber Security Curriculum
- What is the DC3 Challenge?
- Forming a team for a Computer Forensics contest
- Student perspective
- Winning formula
- Aftermath of winning

Wilmington University

- Open Access
- Undergraduate, Graduate, and Doctoral Programs
- 11,000 students
- Based in Delaware with sites in New Jersey
- Commuter
- Non-traditional + traditional student base
- Face-to-face and Distance Learning Offerings
- Private
- Affordable - ~ $9000 annual tuition

Campus Locations

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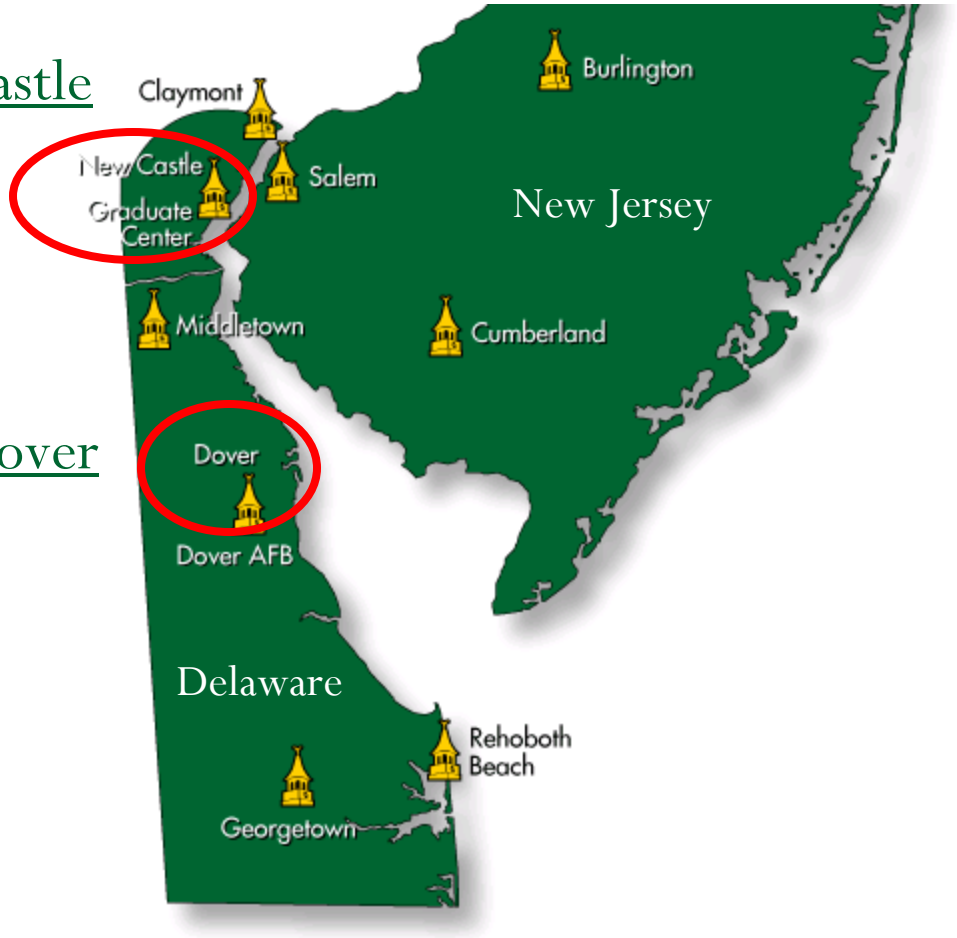
New Castle

Dover



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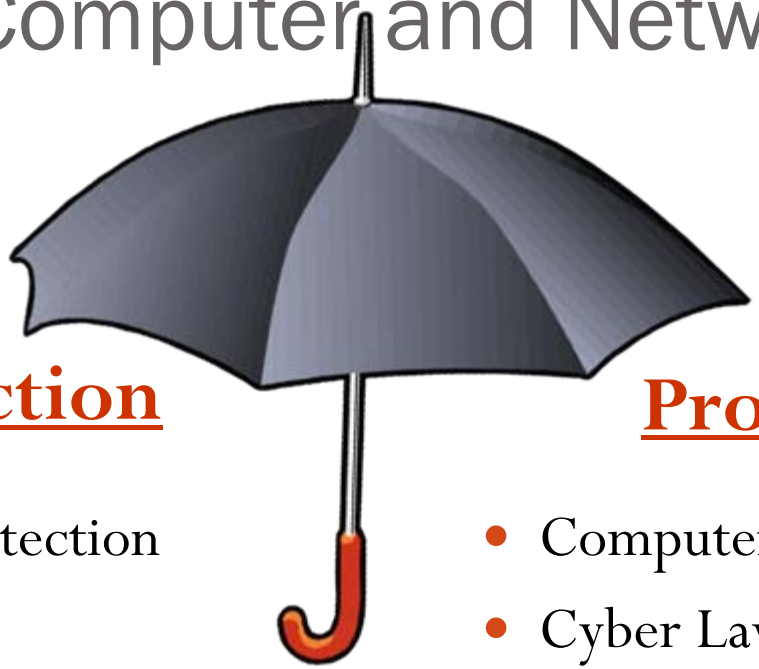
B.S. Computer and Network Security



Protection

- Intrusion Detection
- OS Security
- Networks
- Disaster Recovery
- Windows & Linux

Prosecution

- Computer Forensics
- Cyber Law
- Evidentiary Procedures
- Electronic Discovery

More about the program: http://www.wilmu.edu/itac/cns_curr.aspx

???

- Department of Defense Cyber Crime Center
  - Computer Forensics and Training for DoD & others
- DC3 Challenge

"The objectives of the Annual Digital Forensics Challenge are to establish relationships; resolve technological issues; and develop new tools, techniques, and methodologies for the digital forensic community."

http://www.dc3.mil/challenge/2010/about/index.php

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2009 Dc3 Digital Forensics Challenge

fissea
Federal Information Systems Security Educators' Association
AWARENESS • TRAINING • EDUCATION

CyberWatch

Dc3

US Cyber Challenge

→ **Overview**

→ Events

Technology and Public Policy

Authentication and Identification

Commission on Cybersecurity for the 44th Presidency

Cyber and Internet Policy

Cybersecurity Podcast Series

Cybersecurity Policy Debate Series

From Science to Policy: Managing Climate Change

Innovation and Globalization

Intelligence Reform

National Security and Space

US Cyber Challenge

Waiting For Sputnik Blog

CSIS Technology and Public Policy Blog

US Cyber Challenge

Part of the: Technology and Public Policy

Encouraging young people to develop the aptitude and skills to become the core of a strong cybersecurity community.

The US Cyber Challenge is looking for 10,000 young Americans with the skills to fill the ranks of cyber security practitioners, researchers, and warriors. Some will become the top guns in cyber security. The program will nurture and develop their skills, give them access to advanced education and exercises, and where appropriate, enable them to be recognized by colleges and employers where their skills can be of the greatest value to the nation.

Select the Competition That Interests You

DC3 Digital Forensics Challenge

EVENTS

U.S. Cyber Challenge: Can We Catch Up?

JUL 27, 2009

TECHNOLOGY POLICY, CYBERSECURITY, TECHNOLOGY

CONTACT

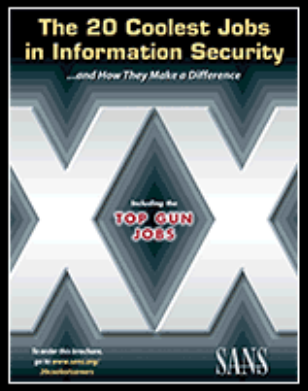
the SANS Institute
(301) 654-7267

Wilmington University is a proud partner of the

U.S. Cyber Challenge

A national competition and talent search
for 10,000 future cyber security experts.

Up for the challenge? Find out more at www.csis.org/uscc



Download the booklet ***20 Coolest Jobs in Information Security*** to learn more about career opportunities
(PDF: 1.3 MB)

CyberPatriot

an Air Force Association (AFA) national high school cyber defense competition
www.highschoolcdc.com

DC3 Digital Forensics Challenge

conducted by the DoD Cyber Crime Center (DC3)
www.dc3.mil/challenge

Netwars

Capture-the-Flag Competition
conducted by the SANS Institute
www.sans.org/netwars

How to Participate

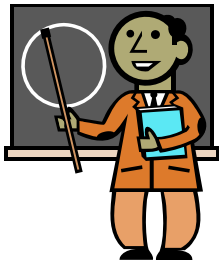
For more information on participating in the U.S. Cyber Challenge visit
www.csis.org/uscc

Wilmington University Degree Programs

B.S. in Computer and Network Security
M.S. in Information Systems Technology, Information Assurance
Wilmington University College of Technology

Diving In

- Two campuses
  - Two teams
- Coaches?
  - Computer Forensics Instructors
- Teams?
- Cost?



Building the Team

- Sell idea
- For Students
  - Exposure
  - Just competing is a great experience
  - Looks good on the resume
- For Instructors
  - Raises the prestige of the school they work for
  - By extension, raises their own prestige

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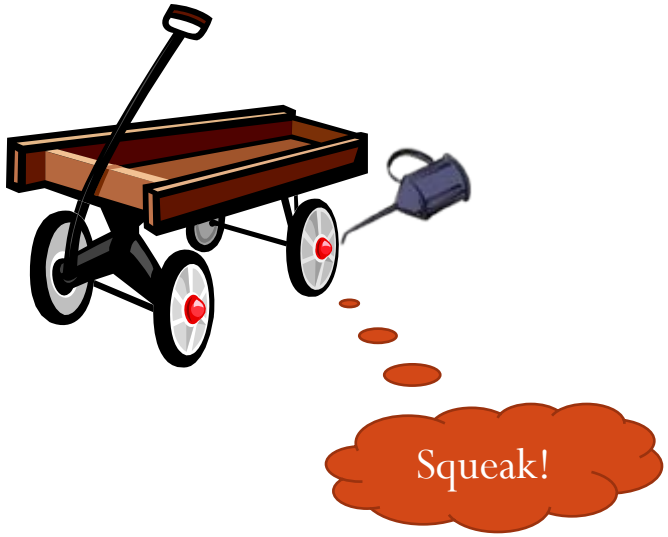
Coordinator Involvement

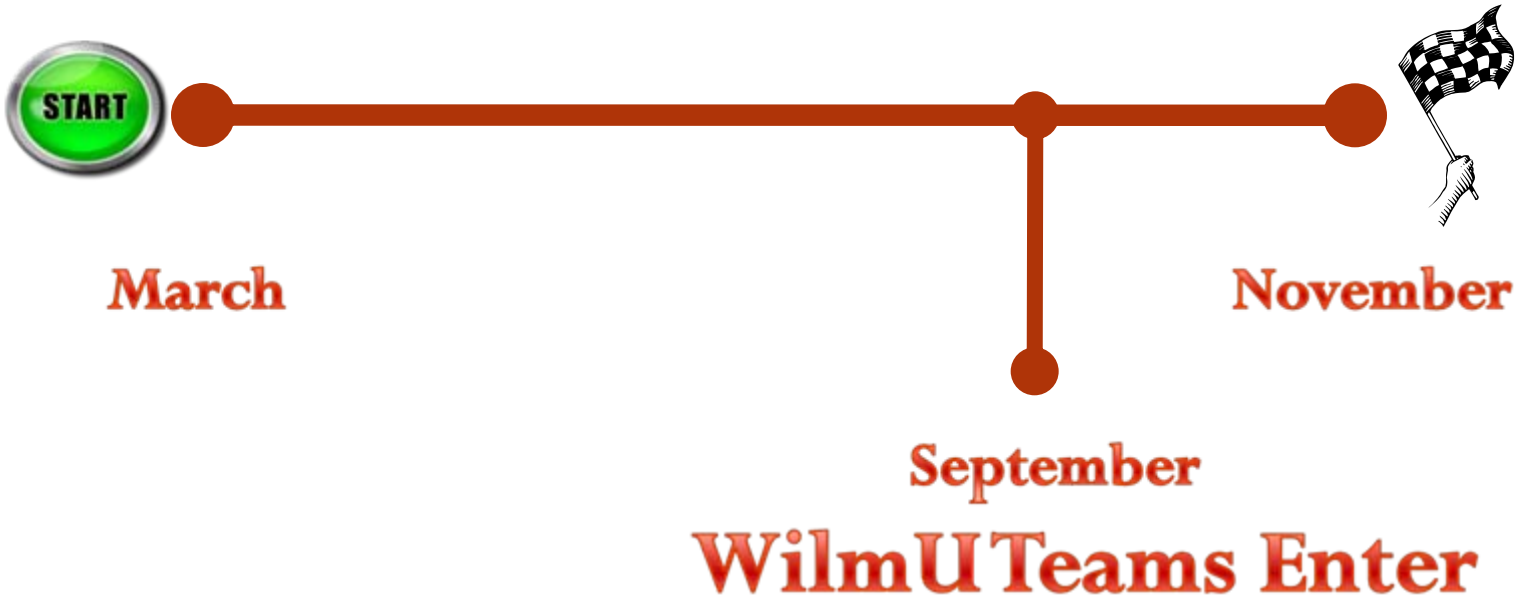
- In the beginning
  - Place a few phone calls
  - Visit a few class rooms
- Students do all the heavy lifting

Student Selection Criteria

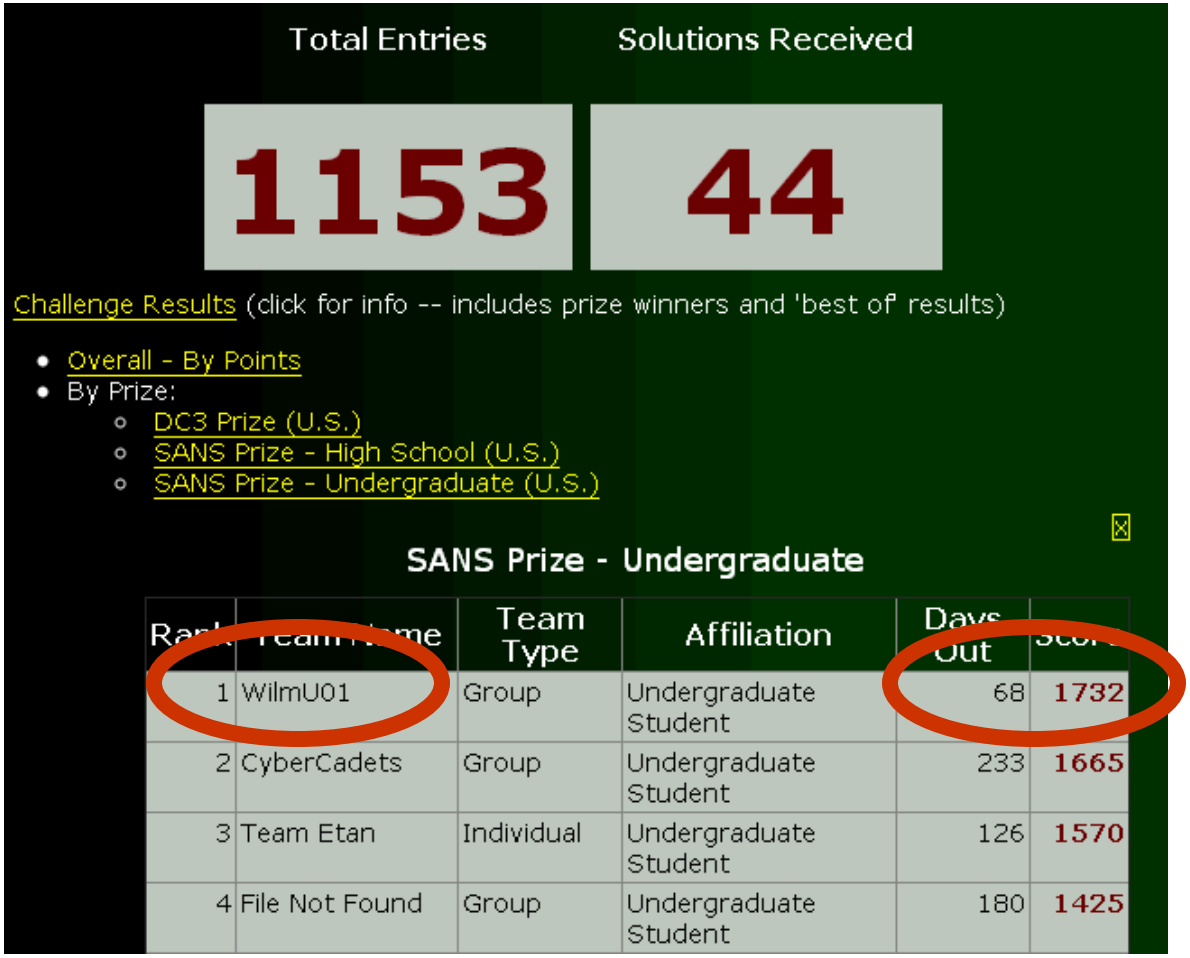
- Past Performance
- Teacher Recommendations
- Obvious Interest



DC3 Timeline



Final Standings - Undergrad



Total Entries: 1153

Solutions Received: 44

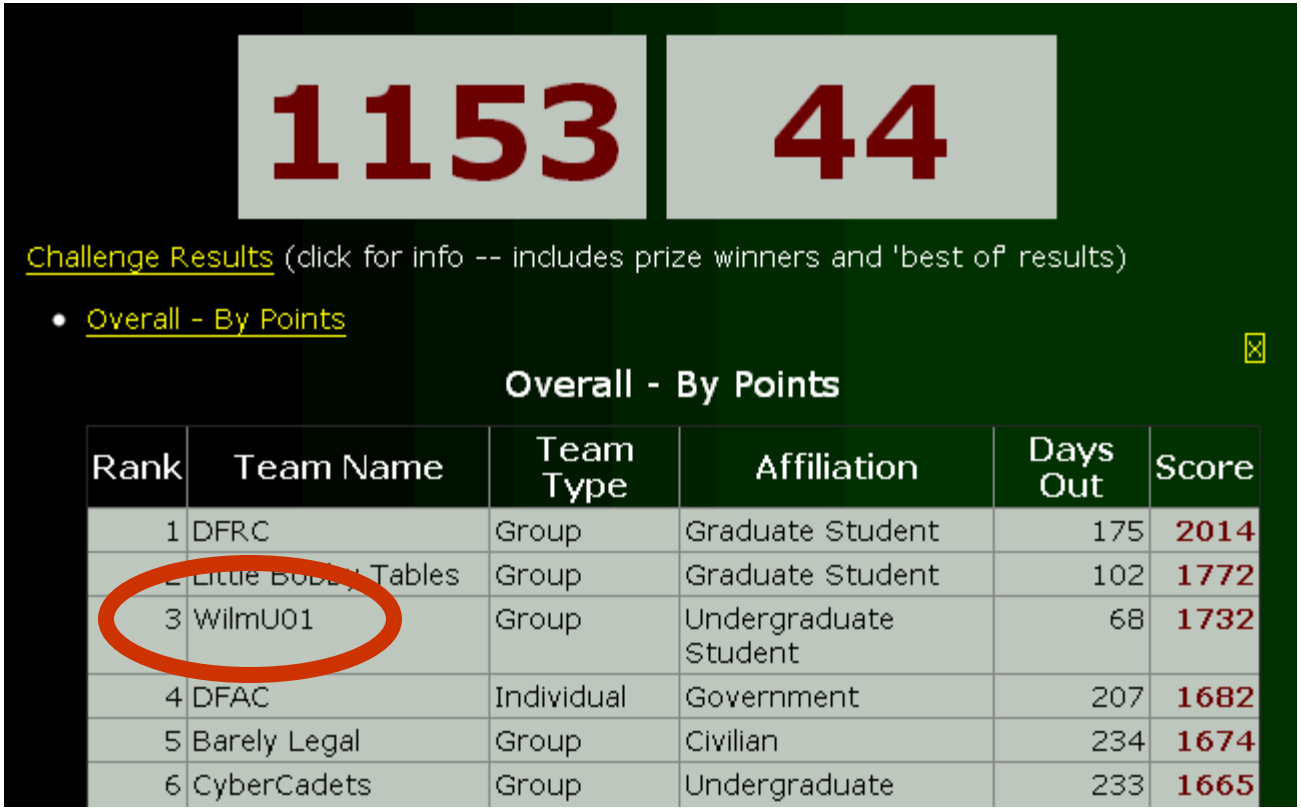
Challenge Results (click for info -- includes prize winners and 'best of' results)

- Overall - By Points
- By Prize:
  - DC3 Prize (U.S.)
  - SANS Prize - High School (U.S.)
  - SANS Prize - Undergraduate (U.S.)

SANS Prize - Undergraduate

Rank	Team Name	Team Type	Affiliation	Days Out	Score
1	WilmU01	Group	Undergraduate Student	68	1732
2	CyberCadets	Group	Undergraduate Student	233	1665
3	Team Etan	Individual	Undergraduate Student	126	1570
4	File Not Found	Group	Undergraduate Student	180	1425

Final Standings Overall



Rank	Team Name	Team Type	Affiliation	Days Out	Score
1	DFRC	Group	Graduate Student	175	2014
2	Little Bobby Tables	Group	Graduate Student	102	1772
3	WilmU01	Group	Undergraduate Student	68	1732
4	DFAC	Individual	Government	207	1682
5	Barely Legal	Group	Civilian	234	1674
6	CyberCadets	Group	Undergraduate	233	1665

“See Spot Run”

- What WilmU01 did best
- Communication is the key
- Challenge – analyze digital evidence
- “Solution” involved a report for the prosecutor

WilmU01 – The Winning Team

Who Would Have Imagined?

Jan. 15th 2009 - Governor Markell and Senator Carper Honor the Team

The Prize

- DC3 Cyber Crime Conference
  - Training
  - Presentation

The Future

- Last year's winners = this year's coaches
- WilmU Cyber Club
- Other Competitions
  - National Collegiate Cyber Defense Competition (CCDC)

Thank You!

References

- Wilmington University
  http://www.wilmu.edu
  http://wilmu.edu/cyberchallenge/index.aspx
- Department of Defense Cyber Crime Center
  http://www.dc3.mil/home.php
- CyberWATCH
  http://www.cyberwatchcenter.org
- U.S. Cyber Challenge, Center For Strategic and International Studies
  http://www.csis.org/uscc
- SANS Institute
  http://www.sans.org