# Peiter "Mudge" Zatko Program Manager, Information Innovation Office

### If you don't like the game, hack the playbook...

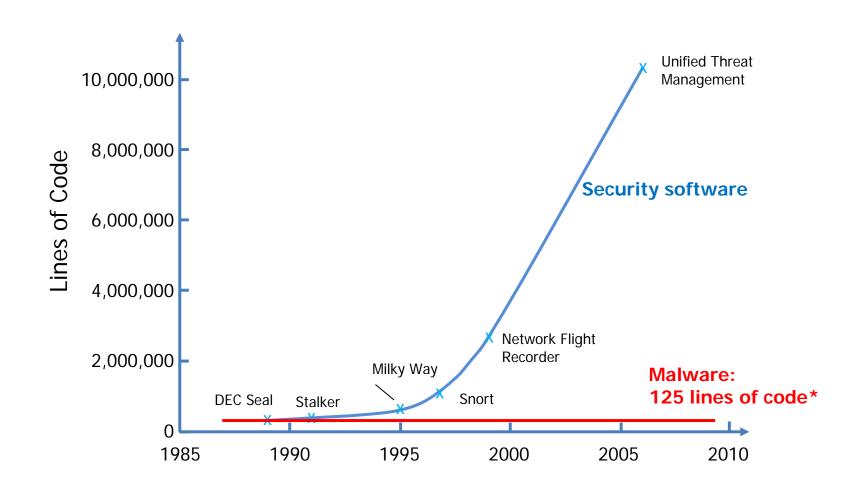
DARPA Cyber Colloquium Arlington, VA

November 7, 2011





# **DARPA** The Problem: Not Convergent



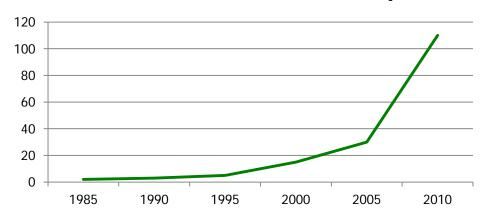
<sup>\*</sup> Public sources of malware averaged over 9,000 samples (collection of exploits, worms, botnets, viruses, DoS tools)



### Maker spaces and boutique security firms

- Small groups of motivated and like minded researchers have repeatedly shown significant talent and capabilities.
- Commodity high end computing, personal prototyping and fabrication capabilities, and open software tools remove barrier to entry.
- The new "home brew computer club"...
- This relationship needs to be mutually beneficial. DARPA intends to cultivate relations and become a resource.

### **Number of US Maker Spaces**

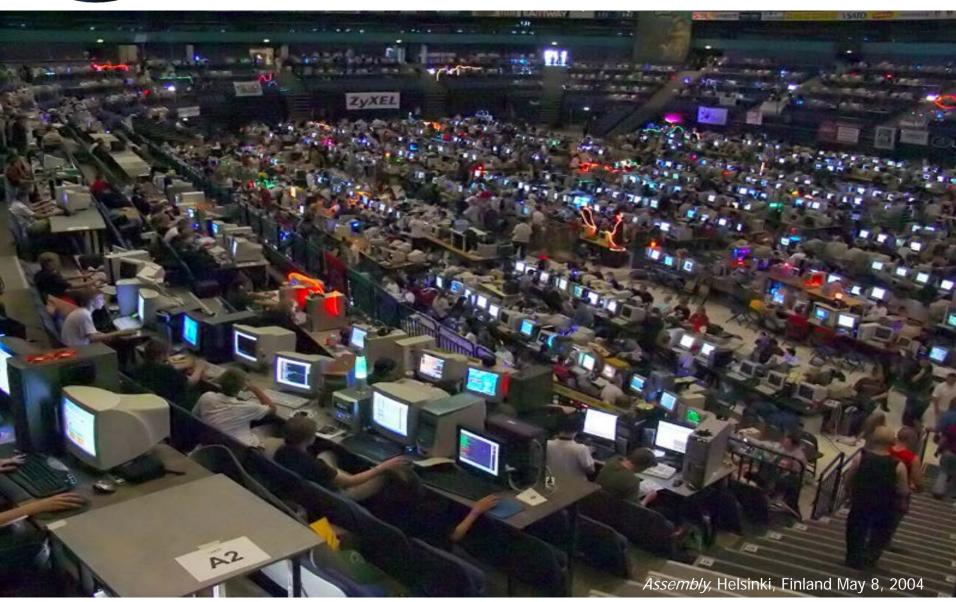




NYC Resistor – Brooklyn, NY Source: Make Magazine



# **DARPA** The New Cyber Braintrust





## Cyber Fast Track

**DARPA-PA-11-52** 





Dino Dai Zovi



Fyodor



Hank Leininger



**Bruce Potter** 



## **DARPA** Cyber Fast Track Themes

- Crowd
  - Many eyes on many efforts
- Fast and cheap
  - Faster than adversary lifecycle (transition while still relevant)
  - Low price point
- Diverse
  - Numerous approaches
  - Numerous efforts

The key to a good strategy is to have multiple options.



# **DARPA** Current Cyber Fast Track Efforts

Performer	Effort	Period of Performance
Rogue Networks	Methods of Detecting Malicious Web Server Traffic	3 Months
Immunity Federal Services, LLC	Combining Expert Knowledge and Symbolic Analysis for Detection of Exploitable Bugs	7 Months
Charlie Miller	Evaluation of Near Field Communication in Mobile Smartphones	7 Months
Secure Ideas, LLC	MobiSec Live Environment Mobile Testing Framework	3 Months
Korelogic, Inc.	Hand Held Testing	2 Months
Assured Information Security, Inc.	MoRE: Measurement of Dynamic Code	4 Months
Peak Security, Inc.	TinyLANE - Mobile Hardware Endpoint Security for Individuals	9 Months
Raphael Mudge	A Language to Control and Automate Cyber Capabilities	7 Months

### Cyber Fast Track So Far...

### In its first 2 months:

- 31 submissions 19 non-traditional performers
- 8 awards 7 non-traditional performers
- Average time from submission to award is 7 days
- Average period of performance: 5 months

### www.cft.usma.edu

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DARPA CFT Town Hall meetings

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