“What is missing from software security?”
CULTURAL INFORMATION PRACTICE OR IDEA OR CONCEPT THEORIES PRACTICES HABITS SONGS NATURAL SELECTION EXAMPLES MIGHT INCLUDE THOUGHTS IDEAS CHARLES DARWIN'S IDEAS SELF-PROPAGATING SURVIVAL AND COMPETITION INFLUENCE THEM MEME
DANGER
MEMES AHEAD
PIRATES ARE ATTACKING U.S. SHIPS OFF THE COAST OF AFRICA. THEY'VE BROKEN THE 100 YEAR TRUCE.

WHO, THE PIRATES?

NO, THE INTERNET MEMES.

IT STARTS WITH PIRATES. THEN THE ZOMBIES AND THE UNICORN RIDING ROBOTS. THE NEXT THING YOU KNOW, BLOOD THIRSTY LOLCATS ARE JUMPING OUT OF ROFLCOPTERS AND OM NOM NOMMING OUR TRACHEAS.

DO NOT WANT!

ACCORDING TO INTERNET LORE, THERE'S ONLY ONE THING THAT CAN STOP A PIRATE. SCURVY? SYPHILIS? A REMEDIAL READING COMPREHENSION TEST?

NO....

NINJAS!

MY THROWING STARS, LET ME SHOW YOU THEM.

I WAS LATE. WHY ARE WE DOING THIS?
Secure software is critically important to almost every aspect of life.
“A fortress mentality will not work in cyber. **We cannot retreat behind a Maginot Line of firewalls**...If we stand still for a minute, our adversaries will overtake us.”

-William Lynn, U.S. Deputy Secretary of Defense
January 2010
CURRENT SOFTWARE
RUGGED SOFTWARE
Le gas goes slowly. The car doesn’t.
...so software not only needs to be...
FAST
AGILE
Are You **Rugged**?
HARSH
UNFRIENDLY
There is no such thing as “toy” software.
ATTACKER’S INTEREST

Software becomes a target at 3% market share
I am rugged - and more importantly, my code is rugged.
I recognize that software has become a foundation of our modern world.
I recognize the awesome responsibility that comes with this foundational role.
I recognize that my code will be used in ways I cannot anticipate, in ways it was not designed, and for longer than it was ever intended.
I recognize that my code will be attacked by talented and persistent adversaries who threaten our physical, economic, and national security.
I recognize these things - and I choose to be rugged.
I am rugged because I refuse to be a source of vulnerability or weakness.
I am rugged because I assure my code will support its mission.
I am rugged because my code can face these challenges and persist in spite of them.
I am rugged, not because it is easy, but because it is necessary... and I am up for the challenge.
Rugged?
WHAT IS RUGGED?
It’s not about style, it’s about the result.
It’s not about external compliance...
RULES

1. you can....
2. you can't....
3. you can....
4. you can't
1) Beyond the choir
2) Beyond technology
3) Aspirational
The Journey

Aware → Informed → Selective → Mature
GETTING INVOLVED
Folks Who Helped Shape This

- Dan Geer, In-Q-Tel
- Chris Hoff, Cisco
- Chris Wysopal, Veracode
- Scott Crawford, EMA
- Pete Lindstrom, Spire Security
- Andrew Hay
- Tom Kellermann, Core Security
- Will Gragido, Cassandra Security
- Eric Hanselman, LeoStream
- Marisa Fagan, Errata Security
- Anton Chuvakin, Security Warrior
- Joe Jarzombek, DHS
- Barmak Meftah, Fortify
- Nick Selby, Trident Risk Mngt
- David Etue, Fidelis
- Rich Mogull, Securosis
- Adrian Lane, Securosis
- Tim Greene, NetworkWorld
- Dan Guido, NYU: Poly
- Caleb Sima, HP
- Ryan Barnett, Breach Security
- Jack Daniel, Astaro
- Jennifer Jabbusch, CAD, Inc.
Next Steps...

• Charter Members
• Introductions to University CS Programs
• Chair and Co-Chair Working Groups
  – Welcome Package: Getting Started
  – Business Cases
How to find out more...
“What does Rugged mean to you?”