



# THE CYBER HERO ADVENTURES™

DEFENDERS OF THE DIGITAL UNIVERSE



NICE

NATIONAL INITIATIVE FOR  
CYBERSECURITY EDUCATION

AON  
Empower Results®

# CYBER RESILIENCE REDEFINED

## We're Here for You

Aon's Cyber Solutions is a world-class cyber security team building confidence in a world of uncertainty. Offering holistic cyber risk management solutions, unsurpassed investigative skills, and proprietary technologies, we help clients uncover and quantify cyber risks, protect critical assets, and recover from cyber incidents.

Our clients call us — and we're at our best — when the stakes are high and the potential for damage is great. We are united by a common goal: to protect today and safeguard tomorrow.

Find out more at [aon.com/cyber-solutions](http://aon.com/cyber-solutions)

**AON**  
Empower Results®

# National Cybersecurity Career Awareness Week

*Inspiring and promoting awareness & exploration of cybersecurity careers*

## Objectives

- Create excitement around increasing public awareness and engagement in building a strong cybersecurity workforce
- Highlight the numerous pathways to enter the cybersecurity career field
- Showcase programs that increase participation of underserved populations in the cybersecurity workforce



## Cybersecurity Workforce Demand

Currently in the US, there are over 300,000 unfilled cybersecurity positions.  
June 2018, CyberSeek.org

The NICE Cybersecurity Workforce Framework categorizes and describes cybersecurity work. Learn more about the numerous pathways to obtain a position in one of these 7 cybersecurity job categories.  
nist.gov/nice/framework



SECURELY  
PROVISION



OPERATE &  
MAINTAIN



OVERSEE &  
GOVERN



PROTECT &  
DEFEND



ANALYZE



COLLECT &  
OPERATE



INVESTIGATE

## How to Get Involved

### For K12 Audiences

- Invite speakers to your school to present lectures and demonstrations about cybersecurity careers
- Create and Display a bulletin board about cybersecurity in your school
- Start a cybersecurity club or competition team
- Partner with a science museum to present hands-on-exhibits about the field of cybersecurity
- Use one of NICE's downloadable resources as a classroom activity

### For Adult Audiences

- Coordinate a lecture, workshop, or activity on careers in cybersecurity
- Set up and staff an exhibit table at a local office or community center to distribute resources
- Launch a social media campaign to spread the word
- Contact local radio or television stations to incorporate a career in cybersecurity segment
- Volunteer to assist or coach a cybersecurity competition team

When?



2<sup>nd</sup> Week  
of November

Want to Learn

More? Visit...

[nist.gov/nice/nccaw](http://nist.gov/nice/nccaw)

**NICE**  
NATIONAL INITIATIVE FOR  
CYBERSECURITY EDUCATION

email: [nccaw@nist.gov](mailto:nccaw@nist.gov)



# ENSURING **SECURE** CLOUD CONTACT CENTERS

PEOPLE HAVE FAITH  
THAT ALL COMPANY DATA  
WILL BE SECURE

TTEC GOES THE  
EXTRA MILE TO  
**MAKE SURE**



## Going Beyond

Additional security controls  
beyond typical baseline  
standards and compliance



## Committed Investment

TTEC invests in up-to-date  
technology to stay ahead  
of the bad guys



## Dedicated Focus

24/7 dedicated security  
operations center with  
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To learn more visit us at [ttec.com](http://ttec.com)

# The World's Most Trusted and Transparent Security Ratings Platform



## Security Scorecard

We are proud to partner with  
The CyberHero Adventures:  
Defenders of the Digital Universe  
to help make the online world a safer place.

And like the **CyberHeroes comic books**,  
SecurityScorecard uses an easy to understand language  
that enables everyone to instantly understand  
the cybersecurity risk of companies.

It's as easy as !

The five hexagons are colored green, yellow, orange, red, and dark red respectively, corresponding to the letters A, B, C, D, and F.



**CRITICAL INFRASTRUCTURE  
ASSOCIATION OF AMERICA, INC.**

**CIAOA**

[www.ciaoa.org](http://www.ciaoa.org)

CRITICAL INFRASTRUCTURE DESCRIBES THE PHYSICAL AND CYBER SYSTEMS AND ASSETS THAT ARE SO VITAL TO THE UNITED STATES THAT THEIR INCAPACITY OR DESTRUCTION WOULD HAVE A DEBILITATING IMPACT ON OUR PHYSICAL OR ECONOMIC SECURITY OR PUBLIC HEALTH OR SAFETY.

THE NATION'S CRITICAL INFRASTRUCTURE PROVIDES THE ESSENTIAL SERVICES THAT UNDERPIN AMERICAN SOCIETY.

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AS AN IMPORTANT PART OF OUR MISSION TO SUPPORT THE COMMUNITY, THE CRITICAL INFRASTRUCTURE ASSOCIATION OF AMERICA IS PROUD TO SPONSOR:

**THE CYBER HERO ADVENTURES**



**The CyberHero Adventures**  
Defenders of the Digital Universe



**PENTESTON® WAS INCUBATED BY  
PROACTIVE RISK AT THE NEW YORK  
UNIVERSITY VETERANS FUTURE LAB AND  
LAUNCHED AT BLACKHAT/DEFCON.**

**PENTESTON® IS A CYBER SECURITY  
VULNERABILITY ASSESSMENT WORKBENCH,  
ALSO KNOWN AS A HACKING PLATFORM, THAT  
IS USED BY INDIVIDUALS, BUSINESSES AND  
SERVICES PROVIDERS. PENTESTON QUICKLY  
SNAPS INTO A PRE-CONFIGURED CYBER-RANGE  
ALLOWING EASY SELECTION OF THE RIGHT  
TOOL FOR THE JOB. ENGAGE A SINGLE SYSTEM  
OR MULTIPLE TARGETS TO DETERMINE IF  
IDENTIFIED TECHNICAL RISK PRESENTS A  
THREAT TO YOUR BUSINESS. FOR LARGE  
PROJECTS, COLLABORATE WITH MULTIPLE  
TEAM MEMBERS, IMPORT AND ENTER MANUAL  
FINDINGS TO A CENTRALIZED QA RESOURCE**

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Stay secure

For a test drive visit

[www.proactiverisk.com](http://www.proactiverisk.com)

# THE **CYBERHERO** ADVENTURES

## DEFENDERS OF THE DIGITAL UNIVERSE!

ISSUE 1



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[WWW.CYBERHEROESCOMICS.COM](http://WWW.CYBERHEROESCOMICS.COM)

15 YEARS AGO...  
IGNITE MARKETING  
CONFERENCE, LONDON UK

OUR PEOPLE  
ARE OUR MOST IMPORT-  
ANT ASSET. THIS IS HOW  
YOU BUILD A HIGH PER-  
FORMING TEAM!

HOW DO I SET UP  
MY COMPANY TO MANAGE  
CHANGE OVER THE  
LONG-TERM?

LARRY JONES  
SPEAKS TO A ROOM OF  
MARKETING EXECUTIVES.

LET'S BEGIN  
BY UNDERSTANDING  
HOW EACH AND EVERY  
STAKEHOLDER WILL  
PROFIT...

PLEASED TO  
MEET YOU MR JONES.  
I'D LIKE FOR YOU TO COME  
SPEAK TO MY COMPANY'S  
EXECUTIVES.

AFTERWARD...

PLEASE CALL  
ME SO WE CAN  
MEET UP.

AFTERWARD...

COME ON...  
YOU KNOW YOU  
CAN'T RESIST!

I TOSS  
THEM INTO THE  
AUDIENCE BEFORE  
A SPEECH.

PEOPLE  
LEARN BETTER AS  
CHILDREN.

FLYING HOME LATER THAT EVENING...

BUBBLE  
GUM?

WOW. THAT  
SCENT SURE TAKES  
ME BACK!

WELCOME  
ABOARD!

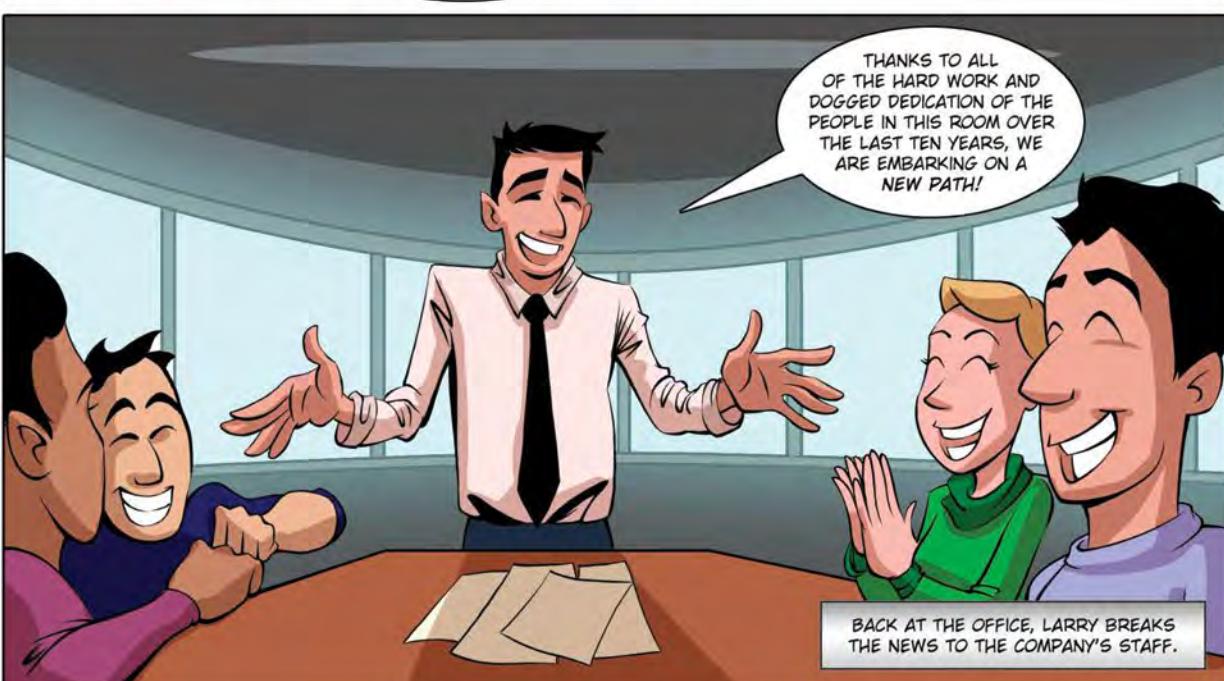
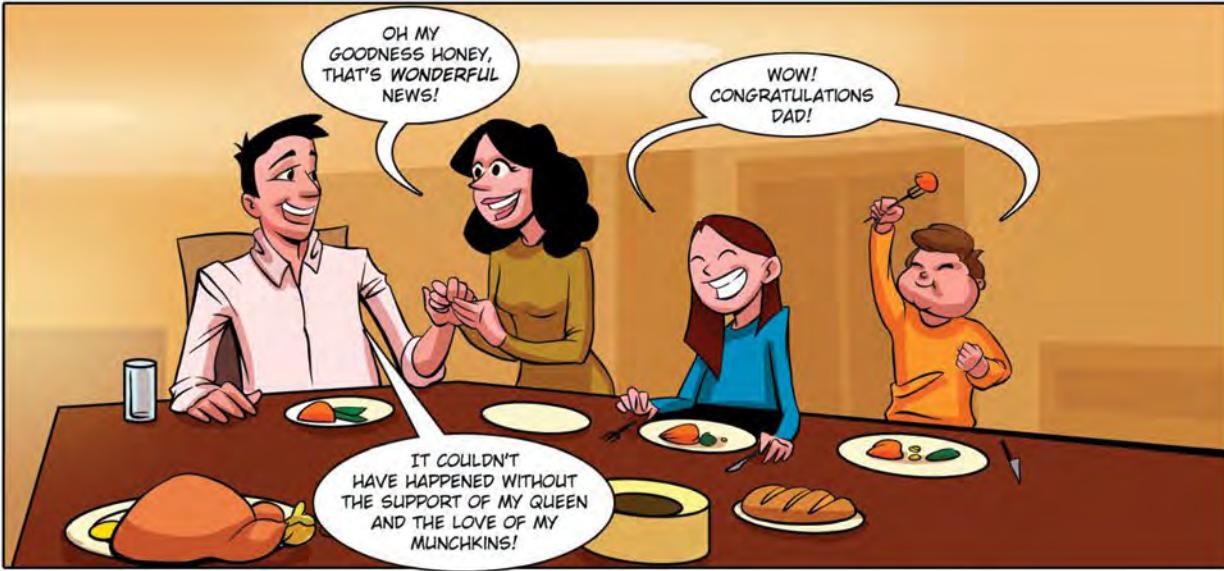
YOU HAVE ANY  
MORE BUBBLE  
GUM?

4 MONTHS LATER...

GLOBA

l.COM

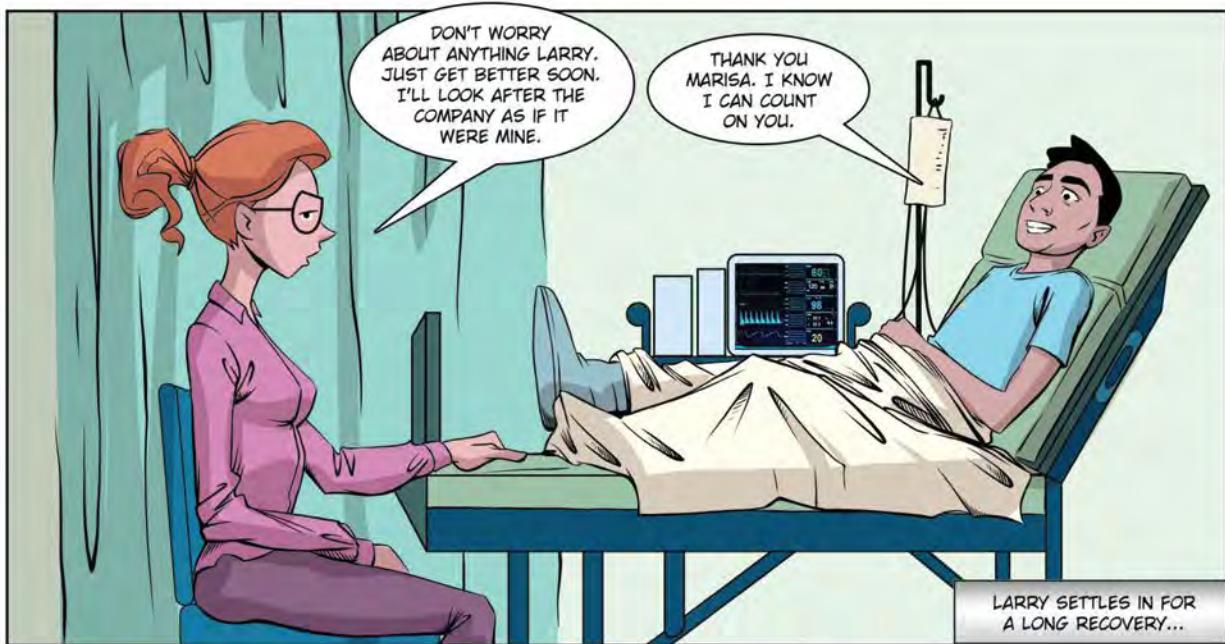
AFTER BUILDING HIS COMPANY THROUGH TEN YEARS OF BLOOD, SWEAT AND TEARS,  
ENTREPRENEUR LARRY JONES SIGNS A DEAL WITH A LARGE GLOBAL STRATEGIC PARTNER.





REVENUE WAS UP AND THINGS  
WERE GOING GREAT UNTIL ONE  
DAY ON THE BASKETBALL COURT...





This letter serves to inform you that my firm has been retained by Lighthouse Imaging in a matter that is of grave concern to your company. Please call me at [REDACTED] convenience.



MEANWHILE, THE MYSTERIOUS "GANG OF 5" PLOT BEHIND LARRY'S BACK...



THE BILLS KEEP PILING UP...



MEANWHILE,  
ELSEWHERE...

- ☒ Start a new company, while still on payroll
- ☒ Copy intellectual property files (including presentations)
- ☒ Download client list
- ☒ Call clients anonymously, alleging fraud
- ☒ Research other ways to build new company on their dime

NEXT MORNING...



I'D LIKE TO  
RESPECTFULLY REQUEST  
THAT EVERYONE READ AND  
SIGN THIS NON-COMPETE  
AGREEMENT.

THIS IS KEY TO  
MAINTAINING YOUR  
POSITION HERE AT  
THE COMPANY.



SEVERAL MINUTES LATER, EVERYONE HAS  
SIGNED EXCEPT FOR FIVE EMPLOYEES...

LARRY TAKES NOTICE...

DID NOT SIGN:

Ms Marisa Mackenzie (Field Manager)  
Ms Rachael Rich (Exec Admin Assistant)  
Mr Max Burgess (Sales Exec)  
Mr Stephen Barnes (I.T. Specialist)  
Mr Clarence Kohara (Human Resources)

LARRY, YOU KNOW  
MY LAWYER INSISTS THAT  
SHE READ ANY AGREEMENT  
BEFORE I SIGN IT. LEAVE  
IT WITH ME.

OH MR JONES,  
WHAT WOULD I KNOW  
ABOUT ANY OF THAT? I'LL  
HAVE MY DAD LOOK IT  
OVER.

C'MON LARRY,  
YOU'RE NOT GOING TO PIN  
ALL OF US DOWN FOR ALL  
THOSE YEARS. I CAN'T  
PREDICT WHAT THE FUTURE  
WILL BRING.

YOU'RE PAINTING WITH  
TOO WIDE A BRUSH. THAT'S LIKE  
ASKING A BANKER NOT TO BE A  
BANKER ANYMORE WHEN SHE  
SWITCHES JOBS.

WHAT'S  
GOING ON  
HERE?

YOU HAVE  
NO IDEA WHAT  
IS GOING ON RIGHT  
UNDER YOUR  
NOSE.

YOU NEED  
TO LEAVE RIGHT  
AWAY!

LARRY CATCHES THE IT DIRECTOR DOWN-  
LOADING DATA ON A SMALL HARD DRIVE.



AFTER RESEARCHING THE ILLICIT ACTIVITIES OF THE "GANG OF 5" OVER THE NEXT 6 MONTHS, LARRY FIRES ALL OF THEM AND CONTEMPLATES LEGAL ACTION.





AS YEARS GO BY, THE HACKS SUBSIDE THE FARTHER LARRY'S BUSINESS ACTIVITIES TAKE HIM AWAY FROM THE FIELD OF MARKETING.



10 YEARS AFTER THE CLOSING OF HIS COMPANY, LARRY FINALLY DECIDES TO RE-ENTER THE MARKETING FIELD...



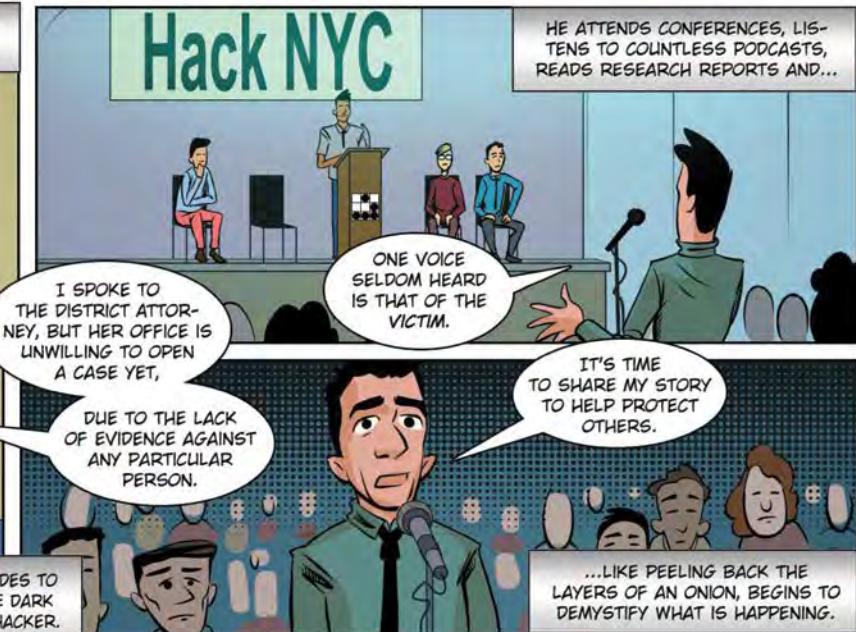
HERE ARE YOUR DOCUMENTS BACK MR JONES.

AFTER ANALYZING THE DETAILS OF THESE COMPUTER AND PHONE SCREEN SHOTS, IT LOOKS LIKE YOU ARE UNDER A HEAVILY ORCHESTRATED CYBER ATTACK.

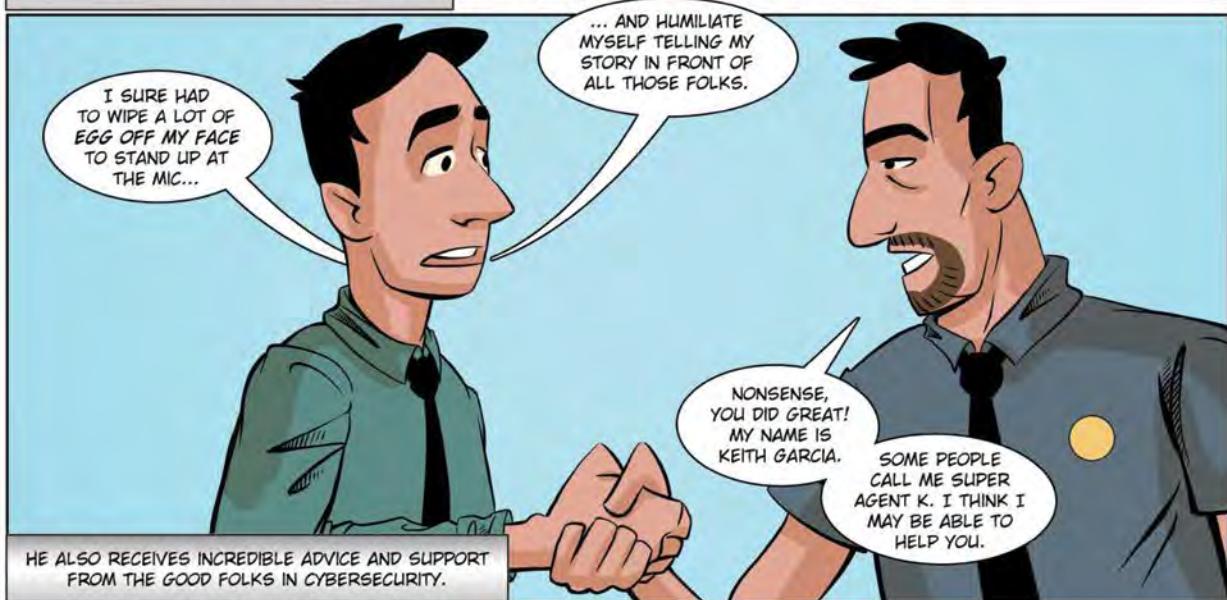
OH, WOW! FEELS GREAT TO HAVE SOMEONE IN YOUR SHOES THINK THAT IT MAKES SENSE. WHAT DO WE DO NEXT?



SEVERAL WEEKS LATER, LARRY GETS A FOLLOW UP VISIT FROM THE FBI...



UNABLE TO RECEIVE JUSTICE, LARRY DECIDES TO LEARN EVERYTHING HE COULD ABOUT THE DARK WORLD OF HACKING TO HELP CATCH THE HACKER.



SUPER AGENT K HAS ALWAYS HAD A PASSION FOR LAW ENFORCEMENT.

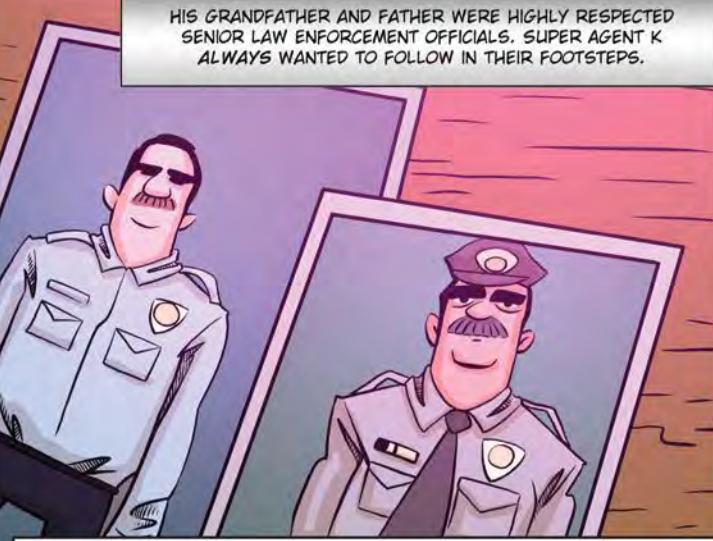
HIS GRANDFATHER AND FATHER WERE HIGHLY RESPECTED SENIOR LAW ENFORCEMENT OFFICIALS. SUPER AGENT K ALWAYS WANTED TO FOLLOW IN THEIR FOOTSTEPS.



WHY? HE WAS SEVERELY BULLIED THROUGHOUT HIS MIDDLE AND HIGH SCHOOL YEARS AND NEVER FOUGHT BACK.



THE TRAINING IMBLED KEITH WITH A SENSE OF POWER AND SELF-RELIANCE, WHICH HE USED TO DEFEAT THE BULLIES. THAT WAS HIS FIRST TASTE OF JUSTICE.



UNTIL ONE DAY HIS UNCLE, A MARINE TRAINER, PUT HIM THROUGH A MINIATURE BOOT CAMP TO STRENGTHEN YOUNG KEITH'S BODY AND MIND.



LATER ON, HE SUFFERED A TERRIBLE ACCIDENT WHILE PLAYING FOOTBALL.



NOW UNABLE TO MEET THE FBI'S STRINGENT PHYSICAL REQUIREMENTS, HIS DREAM OF BECOMING AN FBI AGENT IS SHATTERED.



HE INSTEAD PURSUES A 20-YEAR CAREER IN TECH AND CYBERSECURITY.



LARRY AND SUPER AGENT K BECOME FAST FRIENDS WITH A UNIFIED MISSION: TO PROTECT AND DEFEND OTHERS FROM THE EXPERIENCES THEY HAD!

SUPER AGENT K AND LARRY ARE INVITED TO A CYBERSECURITY CONFERENCE HOSTED AT THE NEXT GEN INSTITUTE.

**TOP SECRET**  
NEXT GEN

MY NAME IS  
TARA BIGHT. WELCOME!  
YOU'RE IN FOR A  
TREAT!

WHILE ON A TOUR OF CUTTING-EDGE CYBER SECURITY TOOLS, THEY DETOUR TO A TOP-SECRET LAB ON THE SECOND FLOOR OF THE FACILITY.

THERE THEY SEE WHAT WOULD SOON CHANGE THE WORLD...

THERE ARE TWO OPERATIONAL MODES:

PROTOPLASM MODE ALLOWS YOU TO SEE VARIOUS CLASSES OF HACKERS AND CYBER CRIMINALS AS THEY ARE IN THE "REAL" WORLD.

THE CREATURES YOU SEE AMONG THOSE PEOPLE ARE DIFFERENT SPECIES OF CYBER SCHEMERS.

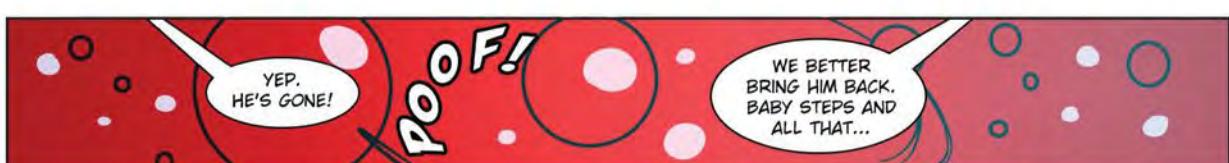
SUPER VIRTUAL-REALITY GLASSES!

WHOAAA!  
SO WHY NOT JUST ARREST THE BAD GUYS WHILE THEY'RE ALL HERE?

THIS CONFERENCE IS NEUTRAL GROUND.

ONLY PLACE WHERE WHITE & BLACK HAT HACKERS CAN MEET WITHOUT RUN-INS WITH THE LAW.





# the cyberwire

I HEAR THE CYBERHEROES  
GET THEIR NEWS FROM  
THE CYBERWIRE!

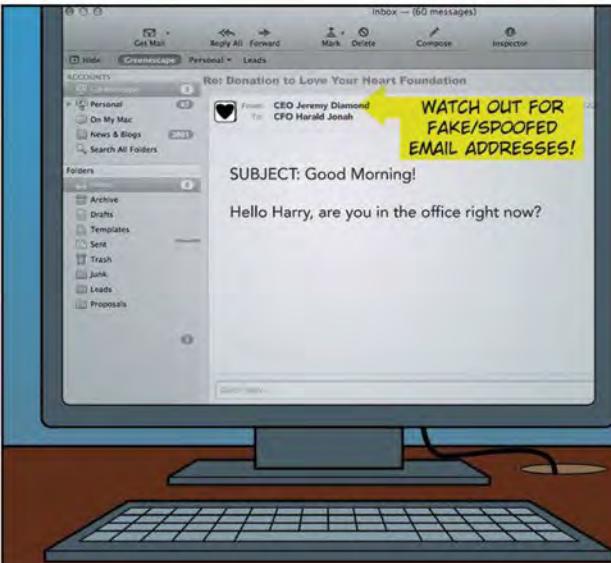
YEAH, BRIEFINGS,  
PODCASTS, EVEN  
ALEXA. YOU SHOULD  
CHECK IT OUT!

**SUBSCRIBE TODAY!**  
[WWW.THECYBERWIRE.COM](http://WWW.THECYBERWIRE.COM)

THE CYBERWIRE IS PROUD TO BE A MEDIA  
PARTNER WITH THE CYBERHERO ADVENTURES.

# PART 2: REELING-IN THE PHISHER!

IN THE FIRST OF MANY CYBER HERO ADVENTURES, WE'LL FOLLOW THE REAL-LIFE STORY OF A COMMON CLASS OF HACK, AND THE UNSUNG HEROES WHO WOULD WORK TIRELESSLY TO PROTECT AND DEFEND THE VICTIMS AND BRING DOWN THE PERPETRATORS.



Heart for Life

MISSPELLING! READ THE URL CAREFULLY!

NO SECURITY CERTIFICATE!

HOME | NEWS | ABOUT US | CAMPAIGNS | SUPPORT | PUBLICATIONS | SHOP | CONTACT US

# Love Your Heart!

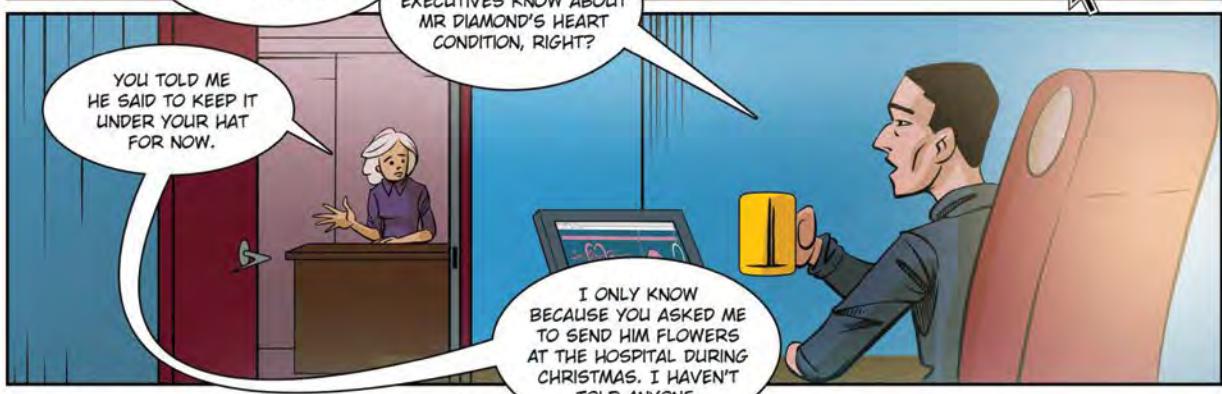
No more stents or pacemakers!

GERALDINE,  
NOT MANY PEOPLE  
BESIDES YOU AND ME,  
VICTOR CHAN...

... AND MAYBE A  
COUPLE OF OTHER  
EXECUTIVES KNOW ABOUT  
MR DIAMOND'S HEART  
CONDITION, RIGHT?

TO MAKE A DONATION:  
[DOWNLOAD BANK DEPOSIT FORM HERE](#)

**CLICK!**



#### WIRE TRANSFER INSTRUCTIONS

Please include the following information on all wire transfers to our bank account:

REMIT TO BANK NAME	
BANK ADDRESS	
ABA NUMBER / SWIFT NUMBER	/
ACCOUNT NUMBER	
FOR CREDIT TO	
FOR FURTHER CREDIT TO	
ACCOUNT NUMBER	
REFERENCE (EX: INVOICE NUMBER)	
AMOUNT AND CURRENCY	

Please contact our Account Manager, \_\_\_\_\_, or by email at \_\_\_\_\_ should you encounter any difficulties.

THANK YOU!

BE CAREFUL WHAT YOU PUT ONLINE  
BECAUSE IT MAY BE USED AGAINST  
YOU AND IT WILL BE "PUBLIC AND PER-  
MANENT" ACCORDING TO RICHARD  
GUERRY, FOUNDER OF THE INSTITUTE  
FOR RESPONSIBLE ONLINE AND CELL-  
PHONE COMMUNICATIONS.

Get Mail Reply All Forward Mark Delete Compose Inspector

Greenscape Personal Leads

Re: Donation to Love Your Heart Foundation

From: CEO Jeremy Diamond  
CFO Harald Jonah

Fill out and transfer the funds as soon as possible. I want to announce my contribution during lunch. Very important to do it before lunch.

From: CFO Harald Jonah  
CEO Jeremy Diamond

What's the nature of this fundraiser?

From: CEO Jeremy Diamond  
CFO Harald Jonah

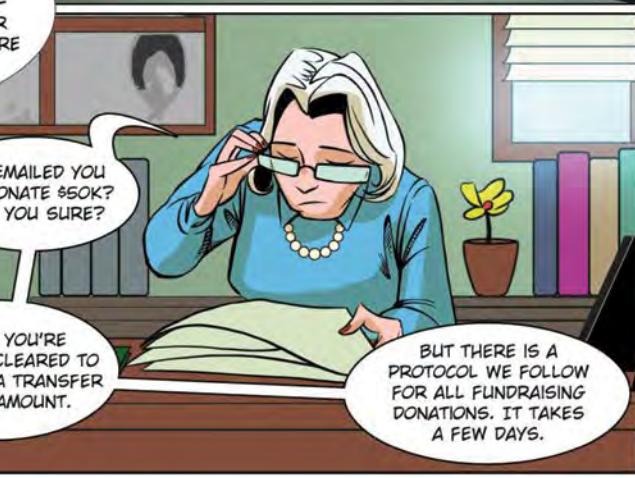
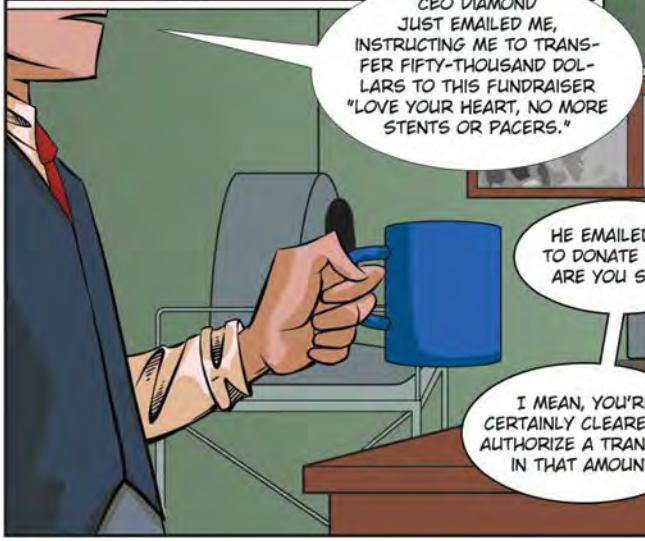
All the information is included in my previous message. I need you to transfer the funds as soon as possible.

5 Quick reply...

From: CFO Harald Jonah  
To: CEO Jeremy Diamond

I'm on it!

1 Quick reply...



BUT THERE IS A PROTOCOL WE FOLLOW FOR ALL FUNDRAISING DONATIONS. IT TAKES A FEW DAYS.

BE CAREFUL...  
EVEN SOCIAL MEDIA  
PROFILES CAN BE FAKE!

YES, I'VE  
CHECKED THEM OUT.  
THEY HAVE A SOCIAL  
MEDIA PRESENCE AND  
SUCH, ALL GOOD!

I COMPLETED THE  
FORM AND SIGNED THE  
PAPERWORK. I AUTHO-  
RIZE YOU TO EXECUTE  
THIS RIGHT AWAY!

WELL, THERE'S  
YOUR SIGNATURE.  
ALL SEEMS TO BE  
IN ORDER. OKAY,  
WILL DO.

I JUST  
NEED TO WRAP UP  
THIS ONE TASK AND  
I'LL GET RIGHT  
ON IT.

YOU'RE THE  
BEST! I HAVE TO  
GO! I'M LATE FOR  
AN IMPORTANT  
MEETING.

PLEASE, LET  
ME KNOW WHEN  
THIS IS DONE.

IT'LL  
BE DONE IN  
LESS THAN 15  
MINUTES.

AND  
C. E. O. JEREMY  
DIAMOND THANKS YOU  
WITH EVERY BEAT OF  
HIS HEART!

Abigail Arnold  
Accounts Payable



Inbox — (60 messages)

Get Mail Reply All Forward Mark Delete Compose Inspector

Greenscape Personal Leads

Re: Donation to Love Your Heart Foundation

From: Abigail Arnold, Accounting  
To: CFO Harald Jonah, CEO Jeremy Diamond

Subject: Task Completed

Per your instructions and authorization in regards to Mr Diamond's request. Here is the confirmation number.

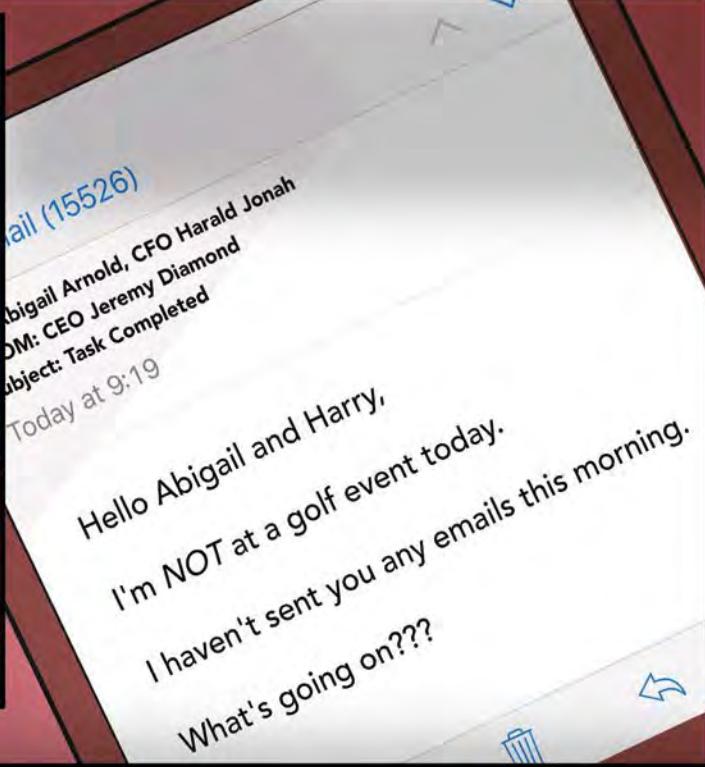
TD Ameritrade Wire Tran:

From: account no: \*\*\*\*\*  
To: account: \*\*\*\*\*7521

Re: Love Your Heart Fundraiser

Amount: \$50,000.00 US

TEN MINUTES LATER...





I'M  
GOING TO BE  
FIRED!

WHAT  
AM I GOING  
TO DO?

CFO HARALD JONAH DECIDES TO CALL  
HIS FRIEND, CYBER SECURITY  
SPECIALIST GEORGE ANTONIOU, PH.D.

PPPPPIIING!

CYBERHEROES.  
DR G SPEAKING.

DR G! OH  
THANK GOODNESS!  
IT'S HARALD JONAH.  
I'VE MADE A BIG  
MISTAKE!

AFTER SWALLOWING HIS PRIDE,  
CFO HARALD JONAH EXPLAINS  
EXACTLY WHAT HAPPENED.

OK HARRY,  
DON'T PANIC YET.  
FORWARD ME A  
COPY OF THE ORIGINAL  
EMAIL. I'LL SEE IF I CAN  
TRACK DOWN THE  
PERPETRATOR.

DR. G IMMEDIATELY FINDS THE RED FLAG:  
A WELL-DISGUISED FAKE EMAIL ADDRESS. SO  
APPARENT TO THOSE IN-THE-KNOW, WHO LOOK A  
LITTLE DEEPER, AT THE ACTUAL EMAIL ADDRESS.

Get Mail Reply All Forward Mark Delete Compose Hide Greenescape Personal Leads

Re: Donation to Love Your Heart Foundation

From: CEO Jeremy Diamond  
To: Jeremy Diamond  
[jeremydiamond8298@aol.com](mailto:jeremydiamond8298@aol.com)

SUBJE

Hello H

FAKE EMAIL ADDRESS!

Add to contacts: Emails

PINPOINT.  
GARCIA HERE!

TOP OF THE  
MORNING SUPER K,  
THIS IS DR G. I'VE GOT  
A TRICKY ONE FOR YOU  
HERE... A WHALING  
ATTACK!

**Pinpoint**  
cybersecurity

SUPER AGENT K SOAKS  
IN THE ENTIRE SITUATION.

WELL DR G, THE  
ONLY THING HE'LL BE  
ABLE TO DO RIGHT NOW  
IS TO CONTACT THE  
FOREIGN BANK AND PUT  
A FREEZE ON THOSE  
ASSETS.

THE THIEVES WON'T  
BE ABLE TO WITHDRAW  
THE MONEY BUT THE COMPANY  
ALSO WON'T BE ABLE TO  
RECOVER THE FUNDS UNTIL  
THE CASE IS SOLVED, MAYBE IN FEW  
YEARS OR MANY YEARS.  
UNLESS...

I'M ALL  
EARS!

...UNLESS  
WE TRAP  
THEM!  
I'LL  
CALL THE  
CYBERHERO!

CYBERHEROES LARRY JONES, DR G, AND SUPER AGENT K UNITE BACK AT THE LAB. A COUNTER ATTACK IS PUT INTO ACTION!

Powered by  
the CyberWire

THIS EMAIL  
LOOKS JUST ABOUT  
RIGHT. WE'LL SEE IF WE  
GET ANY BITES BACK  
FROM THE PHISHER.

I'M  
READY TO  
SET THE  
TRAP!

To: CEO Jeremy Diamond  
 CC: Abigail Arnold  
 Subject: Additional Funds for Love Your Heart Foundation

Hello Mr. Diamond,

I hope your morning on the links has refilled your tanks. Jane showed up this morning with a new perfume, whew! My allergies are on code red! But I digress...

Per your request, I wire-transferred \$50,000 to account number 92-6937739. As I was doing that, I stumbled on your memorandum regarding doubling the amount of donations to heart disease research charities as a company policy for the new year.

Our protocol dictates that you "sign off" on our secure website by entering pin [xz19lo] to authorize the extra \$50K. I'm providing the details here for your convenience, since I know you're at the event and might not have it handy.

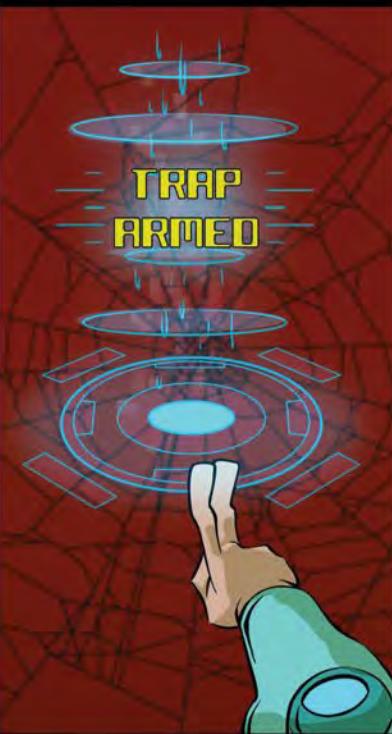
Arrow Bank  
 Acct No: 6070255747179  
 Routing: 092707912  
 u/n: TheSquarePointGroup (case sensitive)  
 p/w: playsD3ADtH3Pr1nt3rD03S

If you have any trouble entering the code, try lower case first then all caps. If you still have trouble, email or call me and I will assist you. Once that's done, Abigail will wire-transfer the extra funds.

Let me know if you need anything else. See you bright and early.

-Harald





MEANWHILE, BACK IN  
THE DARK WEB...



PHISHING IS THE MOST COMMON TYPE OF ONLINE SCAM. IT REFERS TO ANY ATTACK BY WHICH FRAUDSTERS IMPERSONATE A LEGITIMATE COMPANY AND ATTEMPT TO STEAL PERSONAL INFORMATION OR LOGIN CREDENTIALS. THOSE EMAILS FREQUENTLY USE THREATS AND A SENSE OF URGENCY TO SCARE USERS INTO DOING THE ATTACKERS' BIDDING.



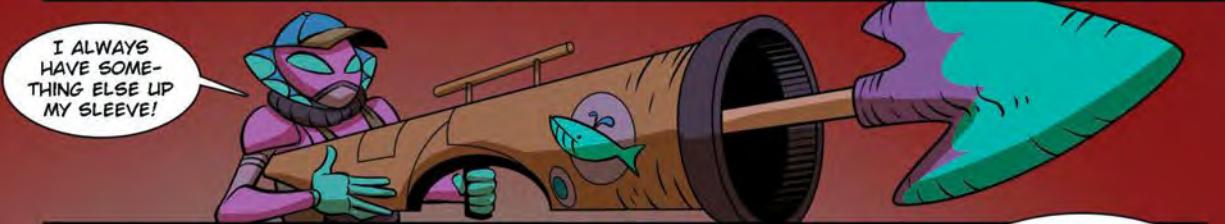
IN SPEAR PHISHING SCAMS, FRAUDSTERS CUSTOMIZE THEIR ATTACK EMAILS WITH THE TARGET'S NAME, POSITION, COMPANY, WORK PHONE NUMBER AND OTHER INFORMATION IN AN ATTEMPT TO TRICK THE RECIPIENT INTO BELIEVING THAT THEY HAVE A CONNECTION WITH THE SENDER.



THE COMBINATION OF GREED  
AND CARELESSNESS CLOSED  
THE CURTAIN FOR THE PHISHER!



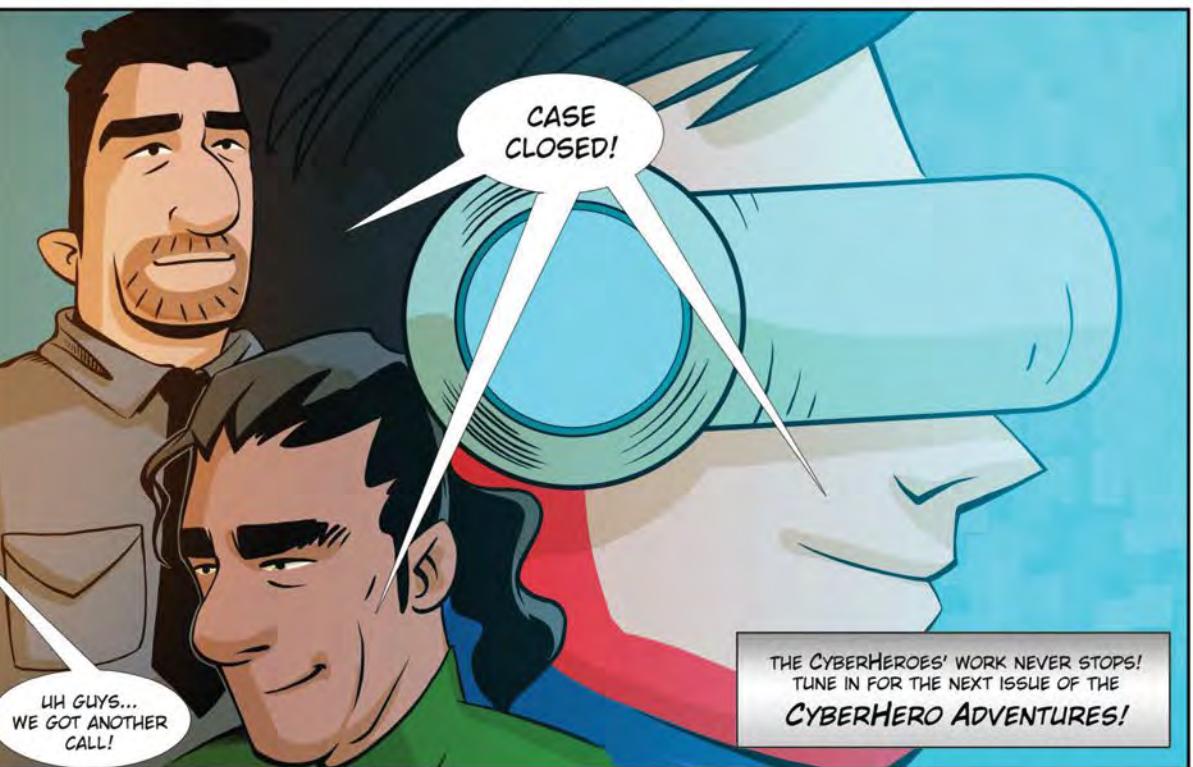
SPEAR PHISHERS CAN TARGET ANYONE IN AN ORGANIZATION, EVEN TOP EXECUTIVES. THAT'S THE LOGIC BEHIND A "WHALING" ATTACK, WHERE FRAUDSTERS ATTEMPT TO HARPOON AN EXECUTIVE AND STEAL THEIR LOGIN CREDENTIALS.



THE CYBERHERO "UNMASKS" THE PHISHER BY DRAINING HER MEMORY BANKS AND COLLECTING DATA THAT WILL POSITIVELY IDENTIFY HER IN THE REAL WORLD!



WORKING WITH FEDERAL AND LOCAL LAW ENFORCEMENT, THE CYBERHEROES ARE ABLE TO TRACK THE SUSPECT AND MAKE AN ARREST!



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# MEET THE CYBER VILLAINS OF THE DARK WEB!



AND BEWARE... THEY LURK IN YOUR COMPUTER, NETWORK, SMARTPHONE, CAR, WEBCAM, THERMOSTAT, BABY MONITOR... EVEN YOUR VACUUM CLEANER! THEY LIVE IN A PLACE WHERE EVEN GOOGLE WON'T TREAD...

**THE DARK WEB!**

IVAN STEALS YOUR NAME, DATE OF BIRTH, SOCIAL SECURITY NUMBER, DRIVER'S LICENSE NUMBER, BANK ACCOUNT AND CREDIT CARD NUMBERS, PIN NUMBERS, ELECTRONIC SIGNATURES, FINGERPRINTS, AND PASSWORDS... ALL IN AN EFFORT TO BECOME YOU!

AT LEAST FOR THE PURPOSES OF STEALING YOUR MONEY AND APPLYING FOR LOANS CREDIT CARDS IN YOU'LL TYPICALLY A VARIETY OF

- RUMMAGING GARBAGE FOR PERSONAL DOCUMENTS AND PHONES.

- STEALING YOUR CREDIT CARDS, CARDS, PASSPORTS AND TOKENS.
- GUESSING COMMON QUESTIONS SUCH AS: NAME?", "FIRST CAR "FIRST PET'S

- SKIMMING CREDIT CARDS USING HAND-HELD CARD READERS.

YOUR FIND IVAN AT  
ILLICIT ACTIVITIES:  
THROUGH YOUR UN-SHREDDED  
OR OLD HARD DRIVES

MAIL TO OBTAIN  
IDENTIFICATION AUTHENTICATION

KNOWLEDGE  
"MOTHER'S MAIDEN  
MODEL?" OR  
NAME?"

INFORMATION FROM

TY OR  
HORSE  
GRAMS.

- HACKING COMPUTER BASES TO OBTAIN LARGE QUANTITIES.

- BRUTE-FORCE WORDS.

- BROWSING SITES FOR PER- BY USERS.

- DIVERTING IN ORDER TO OBTAIN PERSONAL INFORMATION AND CREDIT CARDS, BILLING STATEMENTS, OR NEW ACCOUNTS MENTS OPENED THIEVES IN THE

- USING 'CONTACTLESS' CREDIT CARD READERS TO ACQUIRE DATA WIRELESSLY.

- DISCREETLY WATCHING OR HEARING OTHERS PROVIDING VALUABLE PERSONAL INFORMATION (SHOULDER-SURFING).

- STEALING PERSONAL INFORMATION FROM COMPUTERS USING BREACHES IN BROWSER SECUR- MALWARE SUCH AS ASTROJAN KEYSTROKE LOGGING PRO-

- PUTER NETWORKS AND DATA- PERSONAL DATA, OFTEN IN

- ATTACKING WEAK PASS-

SOCIAL NETWORKING SONAL DETAILS PUBLISHED

VICTIMS' EMAIL OR MAIL OBTAIN PERSONAL INFORMATION DENTIALS SUCH AS CREDIT AND BANK/CREDIT CARD TO DELAY THE DISCOVERY OF AND CREDIT AGRE- BY THE IDENTITY VICTIMS' NAMES.

# IVAN THE IDENTITY THIEF



INTERPOL  
case #  
F-34937H-75U



WANNACRY IS AN INSIDIOUS FORM OF RANSOMWARE CRYPTOWORM THAT ATTACKED THE MICROSOFT WINDOWS OPERATING SYSTEMS OF INDIVIDUALS AND BUSINESSES AROUND THE WORLD BY ENCRYPTING THE USER'S DATA (LOCKING THEM OUT OF THEIR COMPUTER) AND DEMANDING RANSOM IN DIFFICULT-TO-TRACE DIGITAL CURRENCIES SUCH AS BITCOIN TO UNLOCK IT, MAKING APPREHENDING AND PROSECUTING THE PERPETRATORS DIFFICULT. THE ATTACK WAS UNPRECEDENTED IN SCALE, INFECTING MORE THAN 230,000 COMPUTERS IN OVER 150 COUNTRIES.

RANSOMWARE ATTACKS ARE TYPICALLY CARRIED OUT USING A TROJAN HORSE DISGUISED AS A LEGITIMATE FILE. THE USER IS DUPED INTO DOWNLOADING OR OPENING IT IN AN EMAIL ATTACHMENT. HOWEVER, THE WANNACRY WORM WAS ABLE TO TRAVEL AUTOMATICALLY BETWEEN COMPUTERS WITHOUT ANY USER INTERACTION.

THE CRIMINALS BEHIND WANNACRY ARE STILL OUT IN THE WORLD, DEVELOPING NEW TRICKS, CODING NEW MALWARE, PLANNING THEIR

NEXT BIG ATTACK!

# WILBUR WANNACRY



HALF HUMAN, HALF INSECT, BORIS IS ABLE TO DETECT AND EXPLOIT VULNERABILITIES IN TECH DEVICES TO GAIN UNAUTHORIZED ACCESS PRIVILEGES, COMPROMISE DATA CONFIDENTIALITY AND INTEGRITY, AND WREAK HAVOC ON EVERYTHING HE TOUCHES.

BORIS HAS BEEN CREATING CHAOS FOR A LONG TIME. FOR EXAMPLE, IN 1996, A SOFTWARE BUG IN ITS GUIDANCE COMPUTER SOFTWARE FORCED THE EUROPEAN SPACE AGENCY TO DESTROY A \$1 BILLION ARIANE 5 PROTOTYPE ROCKET LESS THAN A MINUTE AFTER LAUNCH.

# BORIS THE BUGGER



FRAUDSTER, SCAMMER, CONFIDENCE ARTIST, GRIFTER, HUSTLER, CHAMELEON. HE GOES BY MANY NAMES. THEY ALL ADD UP TO ONE THING: SONNY THE SOCIAL ENGINEER IS A MASTER MANIPULATOR OF HUMAN BEHAVIOR. HIS GAME IS TO TRICK YOU INTO BELIEVING WHATEVER HE WANTS IN ORDER TO STEAL YOUR MOST VALUABLE AND PERSONAL INFORMATION.

HIS WEAPONS ARE BASED ON EMOTIONAL INTELLIGENCE. HE DOES NOT HESITATE TO TAKE ADVANTAGE OF THE MOST EXCITING OR SAD MOMENTS. HE WIELDS FEAR LIKE A WHIP. HE PREYS ON ANY PERCEIVED WEAKNESS TO BRING DOWN HIS TARGETS AND ENRICH HIMSELF IN THE PROCESS.

# SONNY THE SOCIAL ENGINEER



THE **RAT** IS AN INSIDIOUS CREATURE WHO IS VERY CLEVER AND STEALTHY. PAY NO ATTENTION TO HIS HORSE-LIKE BODY OR HIS GARNERLY RAT FACE... BUT TO THE LENGTH OF HIS TAIL. IT'S SINEWY AND ABLE TO INSERT ITSELF, WITHOUT DETECTION, INTO ANY DEVICE ON THE INTERNET. MOST-COMMONLY IN

PARTNERSHIP WITH THE PHISHER, A SIMPLE CLICK ON A LINK IN AN OFFICIAL-LOOKING EMAIL LETS THE **RAT** AND HIS CREW INTO YOUR LIFE TO TURN IT UPSIDE-DOWN. ONCE INSIDE, HE COMPLETELY TAKES CONTROL OF YOUR ONLINE EXISTENCE, WHICH HE CAN THEN MANIPULATE, DESTROY, AND DELETE.

**RANDALL R.A.T.**



THIS SICKLY CREATURE SPREADS ITS DISEASE AND CONTAMINATES EVERYTHING IT TOUCHES. A COMPUTER VIRUS IS MALICIOUS SOFTWARE ("MALWARE") THAT REPLICATES ITSELF BY MODIFYING OTHER COMPUTER PROGRAMS AND INSERTING ITS OWN CODE.

VERNAN THE VIRUS TEAMS UP WITH SONNY THE SOCIAL ENGINEER, EMPLOYING A VARIETY OF MECHANISMS AND DECEPTIONS, COMPLEX ANTI-DETECTION STEALTH STRATEGIES TO EVADE ANTIVIRUS SOFTWARE, AND DETAILED KNOWLEDGE OF SECURITY VULNERABILITIES TO INFECT NEW HOSTS AND SPREAD THE DISASTROUS VIRUS. THEY ARE A DANGEROUS DUO INDEED!

CAUSING SYSTEM FAILURE, WASTING COMPUTER RESOURCES, CORRUPTING DATA, AND GREATLY INCREASING MAINTENANCE COSTS, VERNAN CAUSES BILLIONS OF DOLLARS' WORTH OF ECONOMIC DAMAGE EVERY YEAR. THE MOTIVES FOR THESE CRIMES VARY - FROM SEEKING PROFIT TO SENDING A POLITICAL MESSAGE, SABOTAGE OR REVENGE, OR SIMPLY FOR PERSONAL AMUSEMENT.

# VERNAN THE VIRUS



**THE PHISHER**  
HUNTS ITS PREY  
BY PRETENDING  
TO BE  
LEGITIMATE  
COMMUNICATION  
FROM A TRUSTED  
COMPANY (OF WHICH  
OFTEN THE VICTIM IS A  
CUSTOMER) - OR -  
FROM THE HIJACKED  
IDENTITY OF A FRIEND,  
COLLEAGUE, OR FAMILY  
MEMBER.

USING ONE OF  
MANY RUSES  
(USUALLY  
INVOLVING SOME  
"PROBLEM" WITH THE  
ACCOUNT), THE PHISHER  
ENCOURAGES THE POTENTIAL  
VICTIM TO DIVULGE SENSITIVE  
INFORMATION, SUCH AS LOG-IN  
IDS, PASSWORDS, PINs,  
SOCIAL SECURITY NUMBERS,  
ETC.

THIS INFORMATION IS QUICKLY USED TO STEAL MONEY FROM ACCOUNTS AND TO APPLY FOR FRAUDULENT LOANS AND CREDIT CARDS. UNDOING THE DAMAGE CAUSED BY IDENTITY THEFT USUALLY TAKES MONTHS OF PHONE CALLS, WRITTEN COMMUNICATION, AND LOTS OF LEGAL AND FINANCIAL RED TAPE. KNOWING HOW TO SPOT THE SIGNS OF A PHISHING ATTACK (LOOKING AT THE SENDER'S ACTUAL EMAIL ADDRESS, FOR EXAMPLE) CAN BE THE DIFFERENCE BETWEEN AN ODYSSEY OF FRUSTRATION AND THE SIMPLE ACTION OF DELETING THE EMAIL AND BEING DONE WITH IT.

AS A GENERAL RULE, NO LEGITIMATE COMPANY WILL EVER ASK A CUSTOMER TO DIVULGE SENSITIVE INFORMATION VIA EMAIL. WHEN IN DOUBT, INSTEAD OF CLICKING THE LINK PROVIDED IN THE EMAIL, TYPE THE COMPANY'S URL DIRECTLY INTO YOUR BROWSER OR CALL A COMPANY

REPRESENTATIVE USING  
A KNOWN OR PUBLISHED  
PHONE NUMBER INSTEAD OF A PHONE NUMBER  
PROVIDED IN THE EMAIL.

# PHOEBE THE PHISHER

NOW MEET THE GOOD PEOPLE!



THE CYBERHEROES

DEFENDERS OF THE  
DIGITAL UNIVERSE!



LARRY JONES (A.K.A. CYBER HERO) KNEW THAT HE NEEDED HELP TO LEARN ABOUT TECHNOLOGY AND HACKING. THE MOST IMPORTANT THING THAT HE NEEDED TO UNDERSTAND WAS: WHY DO HACKERS DO WHAT THEY DO? AFTER LISTENING AND LEARNING ABOUT HACKING AND CYBER SECURITY FROM THE AMAZING PEOPLE IN LAW ENFORCEMENT, SUCH AS THE FBI, CYBER SECURITY EXPERTS, THE DEPARTMENT OF DEFENSE, THE DEPARTMENT OF HOMELAND SECURITY AND ACADEMIA, LARRY BEGAN TO UNDERSTAND THAT ALMOST ALL OF THE HACKERS WERE ACTUALLY TRYING TO HELP (WHITE HATS) BY PROGRAMMING AND HER DESTINY WAS DEFENDING THE WORLD AGAINST CYBER CRIMINALS (BLACK HATS).

THERE WERE ALSO MANY GREAT PEOPLE WHO WERE THREAT RESEARCHERS WHO DISCOVERED VULNERABILITIES IN COMPUTERS AND CONNECTED DEVICES TO HELP PROTECT US ALL (GREY HATS). LARRY KEPT HEARING THE NAME OF ONE PERSON WHO WAS CONSISTENTLY MENTIONED AS BEING THE BEST HACKER IN THE UNIVERSE: QUEEN JIO. FROM THE MOMENT THAT SHE WAS BORN, HER PARENTS KNEW THAT SHE WAS DESTINED TO BECOME A POWERFUL LEADER AND ROLE MODEL AND TO SHED SUNLIGHT ON A DARK WORLD, SO THEY NAMED HER JIO (AN ANCIENT TERM FOR "SUN"). HER FIRST WORDS WERE: WHO, WHAT, WHERE, WHEN AND MOST IMPORTANTLY...HOW? SHE QUICKLY DISCOVERED COMPUTERS AND SEALED TO SPREAD SUNSHINE ON A DIVERSE AND INCLUSIVE WORLD.

# QUEEN JIO

TM



LARRY IS A "REGULAR GUY" WHO IS AN EXPERT AT MARKETING COMMUNICATIONS AND CORPORATE TRAINING. HE RAN A SUCCESSFUL COMPANY THAT WAS SUBSEQUENTLY SOLD TO GLOBALCOMM. EVERYTHING WAS GOING GREAT UNTIL ONE DAY HE RECEIVED A FATEFUL CALL. UNBEKNOWNST TO HIM, ONE OF LARRY'S EXECUTIVES PHONED GLOBALCOMM PRETENDING TO BE A WHISTLE-BLOWER AND SPREAD A RUMOR THAT THERE WAS RAMPANT FRAUD THROUGHOUT LARRY'S COMPANY AND THAT ALL CLIENTS SHOULD STOP ALL COMMUNICATIONS!

LARRY LOST MILLIONS OF DOLLARS AND HIS HOME. HE WAS FORCED TO FIRE ONE HUNDRED EMPLOYEES. ONLY YEARS LATER, LIKE PEELING THE LAYERS OF AN ONION, LARRY BEGAN TO UNDERSTAND THAT HE WAS BEING

VICTIMIZED BY A SERIES OF INSIDER CYBER ATTACKS THAT FUNNELED HIS BUSINESS INTO A SHADOW COMPANY CONTROLLED BY SEVERAL FORMER EXECUTIVES. THEY SPOOFED HIS WEBSITE, RE-DIRECTED CALLS TO THE SHADOW COMPANY AND DESTROYED HIS REPUTATION.

UNABLE TO PROVE HIS CASE AND RECEIVE JUSTICE DUE TO THE DIFFICULTY OF IDENTIFYING THE PLOT AND THE HACKER, LARRY DECIDED TO PIVOT FROM BEING A VICTIM TO BECOMING AN ADVOCATE. HE LEARNED EVERYTHING HE COULD ABOUT CYBER SECURITY. LIKE DOROTHY IN THE WIZARD OF OZ, LARRY MEETS WONDERFUL CYBERHEROES ALONG THE WAY, WHO ARE MISSION-DRIVEN CHARACTERS JOINING HIM ON HIS QUEST TO RAISE AWARENESS OF CYBERCRIME AND TO DEFEND THE DIGITAL UNIVERSE!

# LARRY JONES, THE CYBERHERO!

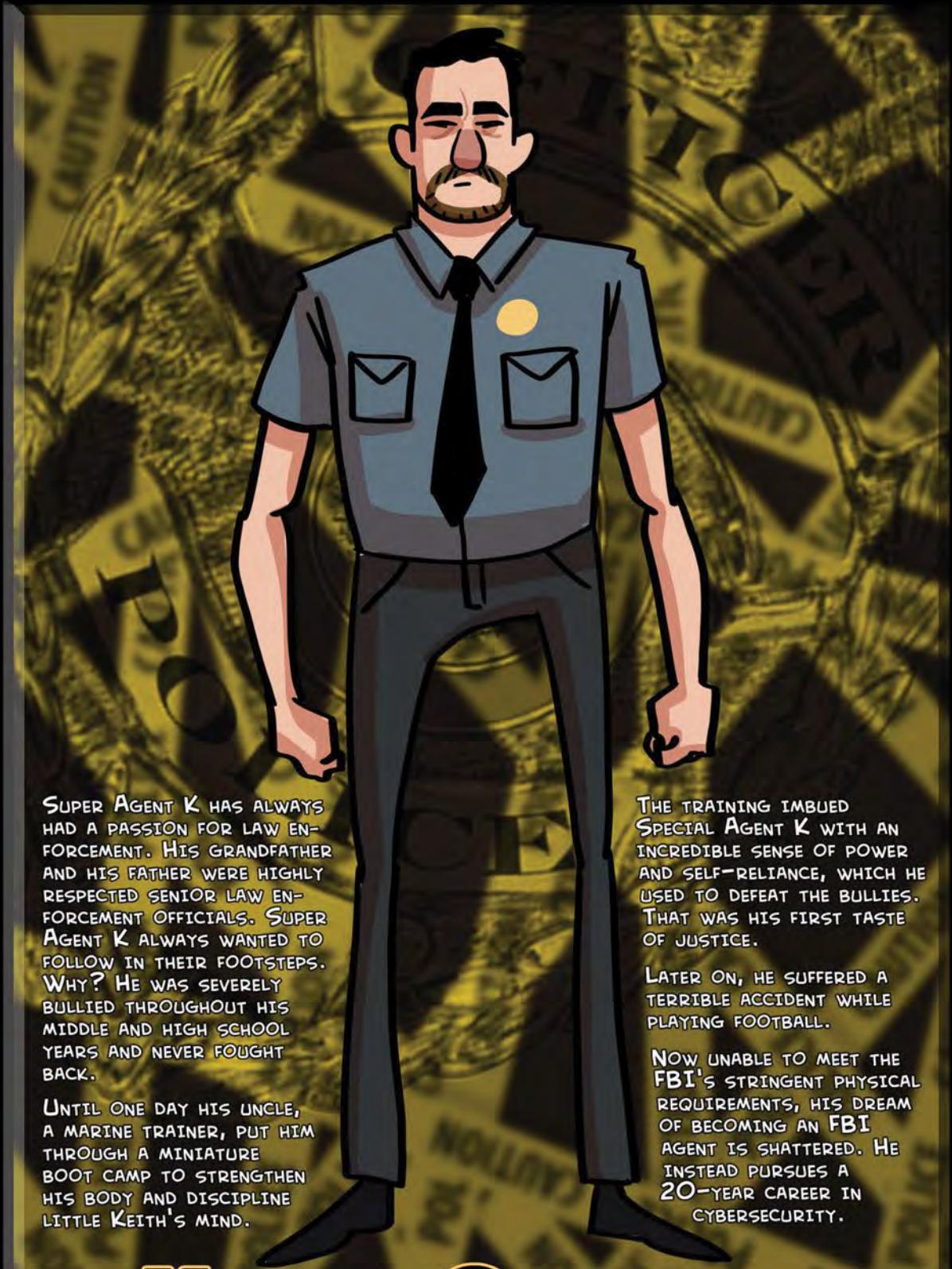


SHE IS ALWAYS READY TO INFORM  
USING HER METICULOUSLY  
RESEARCHED POWER PRESENTATION  
SLIDES THAT PROJECT FROM A  
LENS IN HER COSTUME. SHE  
SUBDUES HER ADVERSARIES WITH  
SLIDES SO DENSE WITH DATA THAT  
THEY ARE OVERCOME BY  
**INSTANT SLUMBER!**

THE PRESENTER IS A SKILLED WHITE-HAT  
EX-HACKER, WHO NOW SPENDS HER TIME  
PROMOTING CYBERSECURITY EDUCATION AND  
FACILITATING PARTNERSHIPS BETWEEN  
GOVERNMENT, ACADEMIA, AND THE PRIVATE SECTOR  
FOCUSED ON SUPPORTING PEOPLE'S ABILITY TO  
ADDRESS CURRENT AND FUTURE CYBERSECURITY  
ISSUES AND WORKFORCE CHALLENGES THROUGH  
STANDARDS AND BEST PRACTICES.

EVEN HER JOB DESCRIPTION PUTS YOU TO SLEEP!

# **PRES**ENTER



SUPER AGENT K HAS ALWAYS HAD A PASSION FOR LAW ENFORCEMENT. HIS GRANDFATHER AND HIS FATHER WERE HIGHLY RESPECTED SENIOR LAW ENFORCEMENT OFFICIALS. SUPER AGENT K ALWAYS WANTED TO FOLLOW IN THEIR FOOTSTEPS. WHY? HE WAS SEVERELY BULLIED THROUGHOUT HIS MIDDLE AND HIGH SCHOOL YEARS AND NEVER FOUGHT BACK.

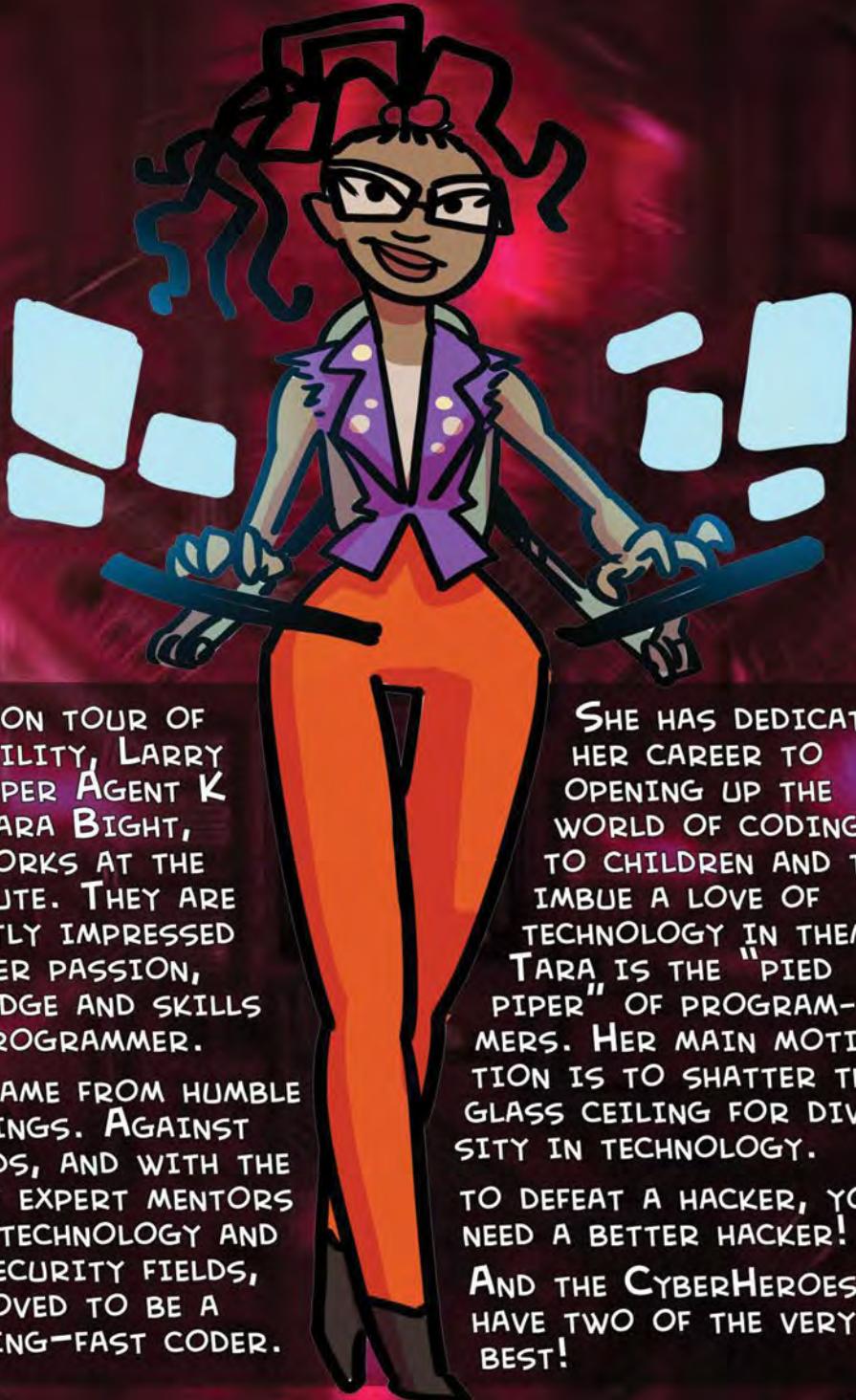
UNTIL ONE DAY HIS UNCLE, A MARINE TRAINER, PUT HIM THROUGH A MINIATURE BOOT CAMP TO STRENGTHEN HIS BODY AND DISCIPLINE LITTLE KEITH'S MIND.

THE TRAINING IMBUED SPECIAL AGENT K WITH AN INCREDIBLE SENSE OF POWER AND SELF-RELIANCE, WHICH HE USED TO DEFEAT THE BULLIES. THAT WAS HIS FIRST TASTE OF JUSTICE.

LATER ON, HE SUFFERED A TERRIBLE ACCIDENT WHILE PLAYING FOOTBALL.

NOW UNABLE TO MEET THE FBI'S STRINGENT PHYSICAL REQUIREMENTS, HIS DREAM OF BECOMING AN FBI AGENT IS SHATTERED. HE INSTEAD PURSUES A 20-YEAR CAREER IN CYBERSECURITY.

# KEITH GARCIA SUPER AGENT K



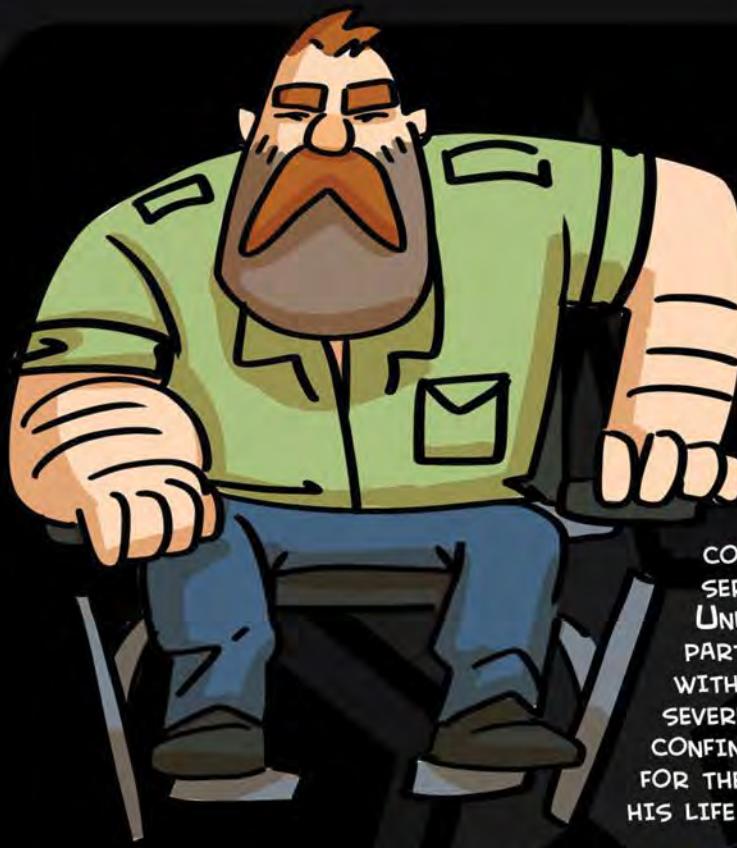
WHILE ON TOUR OF THE FACILITY, LARRY AND SUPER AGENT K MEET TARA BIGHT, WHO WORKS AT THE INSTITUTE. THEY ARE INSTANTLY IMPRESSED WITH HER PASSION, KNOWLEDGE AND SKILLS AS A PROGRAMMER.

TARA CAME FROM HUMBLE BEGINNINGS. AGAINST ALL ODDS, AND WITH THE HELP OF EXPERT MENTORS IN THE TECHNOLOGY AND CYBERSECURITY FIELDS, SHE PROVED TO BE A LIGHTNING-FAST CODER.

SHE HAS DEDICATED HER CAREER TO OPENING UP THE WORLD OF CODING TO CHILDREN AND TO IMBUE A LOVE OF TECHNOLOGY IN THEM. TARA IS THE "PIED PIPER" OF PROGRAMMERS. HER MAIN MOTIVATION IS TO SHATTER THE GLASS CEILING FOR DIVERSITY IN TECHNOLOGY.

TO DEFEAT A HACKER, YOU NEED A BETTER HACKER! AND THE CYBERHEROES HAVE TWO OF THE VERY BEST!

# TARA BIGHT THE SUPERCODER



LEONIDAS SERVED HIS COUNTRY WITH DISTINCTION AS AN OFFICER IN THE MILITARY. HE AND HIS FAMILY HAVE MADE COUNTLESS SACRIFICES IN SERVICE TO AMERICA. UNFORTUNATELY, DURING A PARTICULARLY VICIOUS BATTLE WITH THE ENEMY, LEONIDAS WAS SEVERELY WOUNDED AND CONFINED TO A WHEELCHAIR REST OF HIS LIFE.

LEONIDAS HAS SUCH A POWERFUL LOVE FOR HIS COUNTRY THAT, EVEN AFTER HIS INJURIES, HE STILL WANTED TO SERVE. HE DECIDED HE WOULD EXPAND HIS MIND AND MOVE INTO MILITARY INTELLIGENCE. HIS MISSION: TO LISTEN AND LEARN ABOUT ATTACK VECTORS TARGETING THE UNITED STATES.

ONE PARTICULAR VECTOR THAT HE REALIZED IS INCREDIBLY DANGEROUS IS CYBER WARFARE. LEONIDAS RECEIVED IN-DEPTH TRAINING AND EARNED CERTIFICATIONS THAT DEVELOPED HIS SKILLS TO IDENTIFY THE ENEMY IN CYBERSPACE. AFTER HEARING LARRY'S AND SUPER AGENT K'S STORIES, LEONIDAS FINALLY FOUND THE TEAM TO HELP HIM ACCOMPLISH HIS MISSION.



# LEONIDAS THE CYBERSOLDIER



JACK THE FIREWALL LOVES RULES. HE LIVES BY RULES. HE DENIES AND ALLOWS ENTRY BY RULES. HE DOES HIS JOB QUIETLY AND UNDER THE RADAR. MOST OF THE TIME, YOU DON'T EVEN KNOW HE IS THERE. HE'S ONE OF THE MOST CHALLENGING OBSTACLES THAT HACKERS HAVE TO BYPASS. A FORMIDABLE OPPONENT TO THOSE WHO WANT TO MERELY SNOOP OR THOSE WHO MEAN TO DO HARM!

HE WORKS IN PARALLEL WITH OTHER FIREWALLS AND TEAMMATES TO FORM DATA DMZ'S AND COMPARTMENTAL AREAS TO PROTECT VALUABLE ASSETS, SYSTEMS, AND INFORMATION. HIS ONLY WEAKNESS? STALE, OLD RULES. IN A CONSTANTLY-CHANGING CYBER LANDSCAPE, JACK MUST ENSURE THAT HIS RULES ARE ALWAYS UP-TO-DATE AND ONE STEP AHEAD OF HIS ADVERSARIES!

# JACK THE FIREWALL



JUSTINA IS A FIRST-GENERATION AMERICAN OF MEXICAN HERITAGE. FROM A YOUNG AGE, SHE DEFENDED THE DEFENSELESS. SINCE THEN, SHE ALWAYS KNEW SHE WOULD BE A LAWYER.

SHE SET OUT TO LEARN ALL SHE COULD ABOUT THE JUDICIAL SYSTEM. MANY YEARS LATER SHE BECAME A PUBLIC DEFENDER, DEFENDING THE RIGHTS OF THE ACCUSED. ONE DAY, SOMETHING SHOCKING HAPPENED TO JUSTINA AND HER COLLEAGUES, WHEN SHE CLICKED ON AN EMAIL AND ALL THE COMPUTERS IN THE OFFICE FROZE.

SHE LATER LEARNED HER OFFICE WAS BEING HELD FOR RANSOM. THEY HAD TO DECIDE: SHOULD THEY PAY? OR SHOULD THEY FIGHT?

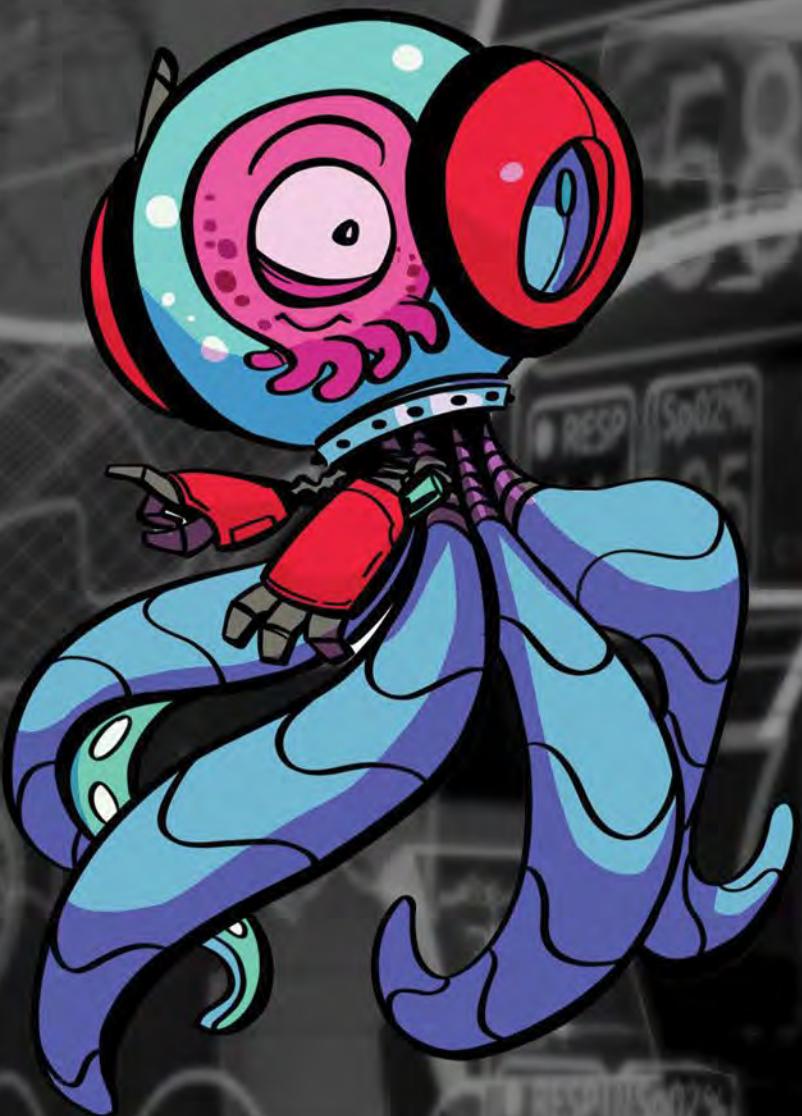
JUSTINA FOUGHT. HARD. EVENTUALLY, SHE EVEN IDENTIFIED THE HACKER... OR SO SHE THOUGHT. WORKING WITH LAW ENFORCEMENT, SHE REALIZED THAT THE LEGAL SYSTEM HAD NOT KEPT PACE WITH THE CHANGING WORLD OF TECHNOLOGY. IN TIME, JUSTINA WAS UNABLE TO BRING THE CRIMINAL TO JUSTICE.

WHEN THE CYBER HEROES SHARED THEIR STORIES, SHE INSTANTLY TOLD THEM:

"I'M IN!"

# JUSTINA JASCO THE DEFENDER





THE INTERNET OF THINGS (IOT) IS A NETWORK OF PHYSICAL DEVICES THAT INCLUDES VEHICLES, HOME APPLIANCES, HEART MONITORING IMPLANTS, STREET LIGHTS, BIOCHIP TRANSPONDERS, CAMERAS STREAMING LIVE FEEDS, AND OTHER ELECTRONIC DEVICES EMBEDDED WITH SOFTWARE, SENSORS, AND ACTUATORS. EACH THING IS UNIQUELY IDENTIFIABLE BUT IS ABLE TO OPERATE WITHIN THE EXISTING INTERNET INFRASTRUCTURE.

Pretty much any object can be turned into an IoT device if it can be connected to the internet and controlled that way. The term 'IoT' is used for devices that wouldn't generally be expected to have an internet connection, and that can communicate with the network independently of human action. Therefore, PCs and smartphones aren't considered IoT devices.

# IOT THE INTERNET OF THINGS



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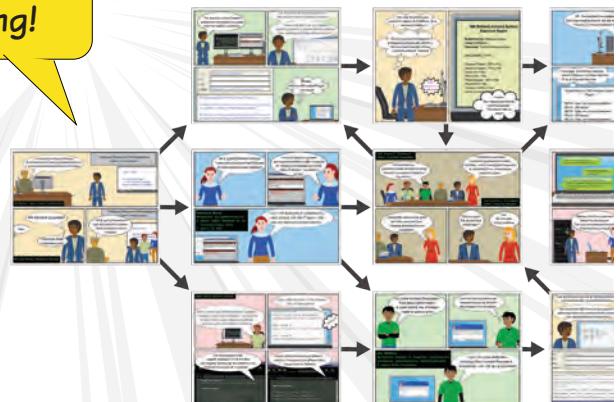
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**"Samsung is excited to partner with Cyberman Security and their CEO, Gary Berman, to support a new wave of technical-security training that creates true collaboration between the Cyber Heroes of the world. Storytelling is the best way to explain, and audiences to retain, the real issues facing corporations during the current digital transformation."**

– Keith Fuentes  
Vice President, Knox Sales, Samsung Electronics America, Inc.

**"Cyberspace needs a hero! In fact, it needs a League of Heroes. If phrases like that stir something within you... and, let's face it, you know that they do, then you will immediately understand the value of this series. CyberHeroes: Defenders of the Digital Universe allows organizations to tap into the global infatuation with superheroes. It's time to suit-up, empower your organization and your family, and advocate for victims."**

– Perry Carpenter  
Chief Evangelist and Strategy Officer, KnowBe4.com

**"The CyberHero Adventures: Defenders of the Digital Universe is truly a game-changer in the rapidly evolving cyber security ecosystem. Depicting the on-going battle between White vs. Black Hats in a superhero world is incredibly educating, interesting, intelligent, intriguing, entertaining and engaging. This is a must-read for large enterprises, SME's, law enforcement, the military, academia, educators and family members who want to stay safe online."**

– Dr. George Antoniou  
Assistant Professor of Cyber Security Management, St. Thomas University

**"I can't thank you enough for presenting your insights and tools to the Best Buddies staff today. Your personal story helped us see how cyber-invasion can happen to anyone at any level. This can be scary and tricky material, but your positive energy brought us out the other side."**

**"We're looking forward to collaborating with you in the future on the creation of a customized version of The CyberHero Adventures: Defenders of the Digital Universe to serve our community of people with and without special needs throughout the United States."**

– Corey Yugler, Director  
Training & Development, Best Buddies Global Headquarters

**"Cyber security leads to cyber safety and as evolving technologies that connect the world continue to make their way into the hands of children, it is vital today's youth and families are armed with information to make them less vulnerable. Using super heros and storylines that children can relate to creates a unique and edu-taining resource that can be used to creatively introduce and educate the next generation of digital citizens about the importance of understanding cyber security. Kudos to Gary Berman for developing and delivering such an important resource to families across our now global neighborhood."**

– Richard Guerry, Founder  
Institute of Responsible Online & Cellphone Communications, Iroc2.org

**"People, Process, and Technology can help protect what matters most. Cyber Hero's is an illustration of providing a light-hearted and simple way to communicate the message that can be easily digested, great job!"**

– Tom Brennan, CTO Proactive Risk

# THANK YOU!

ONE OF THE MANY LESSONS THAT I'VE LEARNED AS THE VICTIM OF A FIFTEEN YEAR SERIES OF INSIDER CYBER CRIMES IS THAT THE ONLY TIME PEOPLE HEAR ABOUT HACKS IS WHEN THE HACKERS ARE SUCCESSFUL. THIS LIFE-CHANGING ENDEAVOR IS DEDICATED TO ALL OF THE UNSUNG, REAL-LIFE CYBER HEROES AND LAW ENFORCEMENT PROFESSIONALS WHO TOIL WITHOUT FANFARE OR ACKNOWLEDGEMENT EVERY DAY TO DEFEND US ALL AT WORK, HOME AND SCHOOL.

THIS INCREDIBLE JOURNEY WOULD NOT HAVE BEEN POSSIBLE WITHOUT THE UNWAVERING SUPPORT OF MY BEAUTIFUL, INTELLIGENT, CHARMING AND FUNNY BETTER-HALF, VALERIE AND OUR TWO AMAZING DAUGHTERS, SARA AND ILANA. THEY HAVE AND WILL ALWAYS BE AN INSPIRATION TO ME AND TO EVERYONE WHOSE LIVES THEY TOUCH. TO MY 90-YEAR-YOUNG MOMMY... IT'S ONLY GOING TO GET BETTER!

WORDS CAN'T ADEQUATELY EXPRESS MY GRATITUDE TO THE MEMBERS OF THE CYBERMAN SECURITY, LLC ADVISORY BOARD. THEY HAVE HELD MY HAND AND SHARED THEIR MORE-THAN-100-YEARS OF COLLECTIVE EXPERIENCE IN CYBER SECURITY AND TECHNOLOGY WITH THE PATIENCE OF SAINTS. THEIR REAL-WORLD EXPERIENCES AS DEPICTED IN THE CYBER HERO ADVENTURES WILL ENLIGHTEN, EMPOWER, AND ENTERTAIN PEOPLE OF ALL AGES AND HELP KEEP EVERYONE SAFE WHILE ONLINE.

AND LAST, BUT NOT LEAST, TO JULIO ALVAREZ AND THE INCREDIBLY TALENTED TEAM AT CREATURE ENTERTAINMENT, THANK YOU FOR YOUR STUNNING CREATIVITY, INCREDIBLE TALENT AND FOR TURNING OUR DREAM INTO A REALITY!



- GARY L. BERMAN, CREATOR  
THE CYBERHERO ADVENTURES:  
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