33rd Annual FISSEA Conference

“Consumer Fraud”

May 16, 2023
9:00am – 5:00pm ET

#FISSEA2023 | nist.gov/fissea
Welcome & Opening Remarks

Marian Merritt
National Institute of Standards and Technology

Kendra Henthorne
FISSEA Co-Chair
Get Involved

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https://www.nist.gov/itl/applied-cybersecurity/fissea/meet-fissea-planning-committee

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https://www.surveymonkey.com/r/fisseacallforpresentations
Opening Keynote: Consumer Fraud

William Brown
Social Security Administration
Social Security Administration
Office of the Inspector General

Federal Information Security Educators
FISSEA CONFERENCE

William Brown
Special Agent in Charge
Digital Forensics and Analysis Division

MAY 16, 2023
Overview

VALUES:

- Passion
- Excellence
- Innovation
- Professionalism
- Inclusion

Investigations  Audit  Chief Strategy Officer
Resource Management  Information Technology  Counsel to the Inspector General
Workforce Performance and Development
Office of Investigations

- Conducts criminal investigations into allegations of fraud in SSA’s programs and operations.
- Oversees several specialized divisions, i.e.,
  - Digital Forensics and Analysis
  - Cooperative Disability Investigations
  - Fraud hotline
- Investigates whistleblower retaliation allegations and misconduct by SSA senior officials and OIG personnel.
- Works closely with federal, state, and local law enforcement partners and participates on national task forces, including those related to COVID-19 fraud.
Investigative Workload

- Disability Insurance fraud
- Social Security number misuse
- Retirement and Survivors Insurance fraud
- Supplemental Security Income fraud
- Social Security-related scams
- Employee Safety
- Employee fraud and misconduct
- Whistleblower retaliation
- CARES Act (pandemic-related fraud)
Government Imposter Scams in 2022

Source: FTC
Why use SSA as bait?

Captive Audience
- Seniors
- Disabled
- Everyone

To Make Money
- Deceptive sale of SSA’s free products or services;
- Deceptive sale of non SSA-related products or services; and
- Worst-case scenarios:
  - Obtain PII to subsequently commit fraud/identity theft.
  - Coerce victim into sending money (money transfers, gift card purchases, etc.).

To Disseminate Information/Misinformation
Four Signs of a Scam

- Pretend
- Prize or Problem
- Pressure
- Payment
Anatomy of an Imposter Scam

International Call Center

Gateway Carrier

Victim

Victim Payment

Money Mules

Elaborate Money Laundering Networks
Social Security-Related Scams

Voicemail

+1 (XXX) XXX-XXXX
Freelandville, IN
May 9, 2019 at 1:08 PM

Transcription Beta
“Everything so if you want to know about this case just press one thank you this call is from the Department of social security administration the reason you have received this phone call from our department is to inform you that we just suspend your Social Security number because we found some suspicious activity so if you want to know about this case just press one thank you…”

Was this transcription useful or not useful?

0:00

Speaker
Call Back
Delete
Scam Tactics

Attention SSN User:

This is to notify that we have been observing some illegal & fraudulent activities associated with your Social Security Number (SSN). So, we have decided to lock your SSN within 24 hours.

In case of any queries, please contact the respective authorities in your total number [redacted]

Regards,
Social Security Administrator,
United States of America.

FAKE

Social Security Administration, 6401 Security Blvd, Baltimore, MD 21235
Scam Tactics
AG Donovan Sues Illegal Robocall Carrier TCA VOIP

March 18, 2022

From the Office of the Vermont Attorney General:

Attorney General T.J. Donovan today filed a federal lawsuit against a California-based company, Telecom Carrier Access doing business as TCA VOIP, and its owner, Dominic Bohnett, for knowingly bringing thousands of robocalls into Vermont. The Attorney General’s Office began its investigation after receiving reports of a robocall displaying an 802-area code, impersonating the Social Security Administration. A traceback investigation, conducted with assistance from the Social Security Administration Office of Inspector General, revealed TCA VOIP to be the source of the call. The complaint alleges that the Defendants violated Vermont’s Consumer Protection Act, as well as other state and federal laws, by knowingly bringing millions of illegal robocalls into the U.S., and thousands, if not hundreds of thousands, of illegal robocalls into Vermont, including government imposter and business imposter scams.
Consumer Protection – Section 1140

Prohibits people, companies, and other organizations from misleading consumers by giving a false impression of association with, or authorization or endorsement by, SSA, through any type of communication.

**Violations:**
- Misrepresenting a connection with SSA;
- Selling SSA forms/publications without authorization; or
- Charging a fee for SSA-related free services without proper notification.

**Penalties:**
- Can impose up to $12,397 for each violation; and up to $61,982 for a violative telecast/broadcast.

**Injunctive Relief:**
- US District Court Order to temporarily stop at issue activity (can also get assets frozen.)
Section 1140 in Use

April – September 2022

Resolved 24 Section 1140 cases
- Imposed $127,403 in penalties
- $19,400 penalty, individual presented an altered SSA form to a foreign government

Penalties against U.S. telecommunications companies, acting as gateway carriers
- 21 cases against gateway telecommunications companies
- $66,000 penalty, Texas-based telecommunications company
- $18,000 penalty, Florida-based telecommunications company
How to Slam the Scam

IF YOU RECEIVE A SUSPICIOUS CALL

HANG UP!

DON'T GIVE THEM PERSONAL INFORMATION

DON'T TRUST YOUR CALLER ID

DON'T GIVE THEM MONEY

REPORT THE SCAM AT OIG.SSA.GOV

DON'T BELIEVE THEM

SSA.GOV/SCAM
Why do we worry about social media?

1. Misinformation can cause unwarranted stress/panic;
2. Fraudulent activity interferes with SSA’s ability to communicate with its customers; and
3. Fraudsters use social media to obtain PII.
SSA’s Official Facebook Account

Join the Millions who already have a my Social Security account. Visit ssa.gov/myaccount
Imposter Account!

Join the Millions
who already have a *my* Social Security account.
Visit ssa.gov/myaccount

Social Security Administration
Government Organization

Send Message
Questions

Thank you!

SOCIAL SECURITY ADMINISTRATION
OFFICE OF THE INSPECTOR GENERAL

OIG.SSA.GOV
Our Need to Rethink Fraud in America

Kathy Stokes
Fraud Prevention Programs
AARP
Agenda

• About AARP and the Fraud Watch Network
• The journey to look at victim-blaming in fraud
• What we’ve learned
• A path forward
• Discussion
AARP in Three Parts

• AARP Foundation
• AARP Services, Inc.
• AARP, Inc. our social mission work & home of the AARP Fraud Watch Network
About the Fraud Watch Network

What We Help You Do

Stay Informed

Find Support

Have a Voice

www.aarp.org/fraudwatchnetwork
Helpline: 877-908-3360
www.aarp.org/fraudsupport
About Our Victim Support Program

1-hour free, virtual sessions
Empowering and supportive
Open to anyone of any age
Lowers stress
Safe space to talk

“This gives me a much deeper understanding of the mental health impact of fraud. Of course, I knew it was devastating - but nothing substitutes for hearing directly from victims.”
-AARP volunteer

www.aarp.org/fraudsupport
Where We Started

• Believed our society blames victims of financial fraud
• Wanted to study it, and determine why
• Wanted to find examples of successful narrative change
Violent and Property Crimes: How We React

Oh, that poor family

I’ll bake them a lasagna
Financial Crimes: How We React

You got duped by that?? It’s the oldest trick in the book!

How could he fall for that??

You’d have to be an idiot...

How much money did you give them?
I can’t believe I fell for this!

How could I be so stupid??
Ripped from the Headlines

Holocaust survivor scammed out of $2.8 million by Florida ...

72-year-old Texas woman scammed out of $75000

FBI: Omaha woman scammed out of $730,000 using ...

USA Today, 1/26/2023

KXAN, Killeen TX 10/8/2022

KETV, Omaha NE 3/1/2023
Why Scams are Successful

The Ether

Heightened emotions block logical thinking

Fear, Excitement, New Love...
The Illusion of Invincibility

• I’d never fall for that

• Only happens to ‘old’ people

• Victim should have known better
The All-Too Human Toll

- Billions of dollars lost, with little chance of restitution
- Nearly 2/3 of victims report experiencing at least one serious health or emotional impact
- Thousands die by suicide
2022 Study

- Lit review, media/entertainment scan, social media scrape, review of narrative change case studies
- Deep session with 30 experts
- Qualitative interviews, quantitative survey
Drivers of Blame

- Attribution bias
- Just world theory
- Rugged individualism
Dimensions of Blaming

• Interpersonal
• Institutional
• Societal
Yes, We Blame. (But we don’t really mean it.)

• Less about true sentiment than the words we use and practices we embrace

• Rooted in cultural values, driven by issues we can address – but how?
A Path Forward
What if we said:

“It is not your fault. Fraud is a crime. I am sorry you’ve had to endure this.”
When the perpetrator is the subject of the sentence, “participants’ ratings of victim blame and victim responsibility went down significantly.”

-The Atlantic, October 2016
Seek Change in the Focus of Scam Coverage

Instead of this:

Woman Scammed of $35k
Grandma Duped in Lottery Scam

Say this:

Fraud Criminal Steals Woman’s Life Savings
Organized Crime Ring - Only Winner in Lottery Scam
Instead of this:
I can’t believe you got duped.
How could you fall for that?
Duped, Swindled, Tricked...

Say this:
It’s not your fault.
Scammers are good at what they do; you experienced a crime.

Implies blame;
Inspires shame

Shows empathy;
Empowers victim
Words are Just the Beginning

- Choose words with intention
- Support victims
- Broaden portrayals
- Humanize through storytelling
- Go after the criminals
Potential Real-World Outcomes

• More reporting
• Family relationships protected
• Police take it seriously
• Prosecutors take more cases
• Policymakers act
• Billions stay in our economy
The Ask of Partners and Friends

• Look closely at your consumer materials and reframe

• Emphasize that scams are crimes and not the target’s fault
  • 53% identify victims as culpable and blameworthy

• Encourage reporting to law enforcement
  • 47% believe reporting is a lost cause
AARP’s Path Forward

• Outreach
  • Professional organizations
  • Federal agencies
  • Media
  • Consumers

• New page: www.aarp.org/wordsmatter
“By this time you have received the fax of the check. **What you don't know is my life. I was a daughter, a wife and a mother.** I grew up in Lockport Ill. My father was a factory worker and my mother was a nurse. We were happy but certainly not rich. My brother graduated from SIU with a degree in Business. He went on to establish a career in Cost Accounting for EMD. I was the bright shining star. Graduated SIU in education. Met my husband and married in 1974. Solid man. Became a Compliance Man for his company.

**My husband and I were the power couple. We were respected in our companies. This was my life.** Now I see disappointment in my children's eyes. They see me as the person who gave away our family money. What you need to know is I am a person. I seriously contemplated suicide during this mess. I was devastated. **Please remember I am a person who failed her children and that is what hurts me the most.**”
Discussion
33rd Annual FISSEA Conference

BREAK: EXHIBIT HALL OPEN

#FISSEA2023 | nist.gov/fissea
Welcome Back!

Kendra Henthorne
FISSEA Co-Chair
Panel – Consumer Fraud

Karey Johnson
Social Security Administration

Michael Benardo
Federal Deposit Insurance Corporation

Raymond Campbell
United States Postal Inspection Service

#FISSEA2023 | nist.gov/fissea
Panel – Consumer Fraud

Overview

Please Tell Us About Your Programs
Panel – Consumer Fraud

Challenges
Panel – Consumer Fraud

Reaching Different Audiences
Panel – Consumer Fraud

Simplicity vs. Effectiveness
Panel – Consumer Fraud

Measuring Success
Private Sector Collaboration
Panel – Consumer Fraud

Favorite Campaign
Panel – Consumer Fraud

New Trends
Panel – Consumer Fraud

Final Thoughts?
33rd Annual FISSEA Conference

LUNCH: EXHIBIT HALL OPEN

#FISSEA2023 | nist.gov/fissea
Welcome Back!

Menachem Goldstein
FISSEA Co-Chair
Featured Presentation:
Scam Trends Affecting Communities and Businesses

Rosario Mendez
Federal Trade Commission
March 2023

Scam Trends Affecting Communities and Businesses

Presented by: Rosario Mendez
Who We Are and What We Do

Protecting Consumers

• Enforcement
• Consumer and business education
• Building partnerships and coalitions
What We’ll Cover

• Top frauds reported in 2022
• Frauds affecting communities of color
• Scams targeting small business
• Where to report fraud
• Free FTC resources
• Working together
Consumer Sentinel Reports

Top Frauds 2022

Number of reports

2.4 million

Amount lost

$8.8 billion
Consumer Sentinel Reports

Top Frauds 2022

1. Imposters
2. Online shopping
3. Prizes, sweepstakes, lotteries
4. Investments
5. Business and job opportunities

FTCTopFrauds
ftc.gov/databook

FEDERAL TRADE COMMISSION
Top Frauds 2022

Losses to business imposters soared.

2020: $196 million
2021: $453 million
2022: $660 million

#FTCTopFrauds
ftc.gov/scams
Top Frauds 2022

Social media: Highest overall reported losses
- $1.2 billion total lost

Phone calls: Highest per person reported losses
- $1,400 median loss

Scammers contacting people on social or by phone led to big losses
Serving Communities of Color
Latino Communities

- Lower reporting rates
- Top scam was impersonator scams
- Business opportunities and job scams
- Payment methods with fewer protections
Black Communities

Top problem reported was credit bureaus

Higher percentage of reports about used car sales

Affected by student debt relief cases

Payment methods with fewer protections
Native American Communities

New FTC Report: Consumer Issues Affecting American Indian and Alaska Native Communities

ftc.gov/NativeAmerican

- Imposter scams
- Prize, sweepstake, and lottery
- Buying and financing a car
- Tech support scams
Asian American and Pacific Islander Communities

The Federal Trade Commission & Ethnic Media Services Present an On-site News Briefing

Scams Targeting AAPI Communities

FTC convenes Bay Area legal experts, consumer advocates, community stakeholders & people who have experienced fraud

**WHEN:**
Thursday, March 30, 11:00 am - 1:00 pm PT (Lunch provided)

**WHERE:**
Please join us for a roundtable briefing at:
World Affairs Center, Auditorium, 2nd Floor
312 Sutter Street, San Francisco, CA 94108
RSVP HERE

- Debt relief scams
- Romance scams
- Crypto investment scams
- Scams targeting small business
How to Avoid Scams
How to Avoid a Scam

- The government won’t contact you out of the blue
- How are you asked to pay?
- Don’t trust caller ID
- Check it out, if you’re worried
- Block unwanted calls and text messages
- Never act immediately
How to Avoid a Scam

English: ftc.gov/scams
Spanish: ftc.gov/estafas
Scam Prevention in Other Languages

Scammers probably speak your language.

Learn to spot/avoid/report scams in a dozen languages.

ftc.gov/languages
Scams Targeting Small Business
Information for Small Business

Protect your small business
Get advice to help avoid scams, protect your network, and customers' data

Proteja su pequeño negocio
Obtenga consejos para ayudar a evitar estafas, proteger su red, y los datos de sus clientes

ftc.gov/SmallBusiness

ftc.gov/PequeñosNegocios
Office Supplies Scams
Impersonation Scams

Government imposters

Utility company imposters
Business Coaching Scams

- Guaranteed success
- Big profit, short time
- Secret strategies
- Up-front fees
Cyber Scams Targeting Small Business
Information for Small Business

CYBERSECURITY for small business

ftc.gov/smallbusiness
Where to report fraud
Report Fraud to the FTC

English:
ReportFraud.ftc.gov

Spanish:
ReporteFraude.ftc.gov
• Consumer basics to help anyone understand things like
• Topics:
  • Managing your Money
  • Credit and loans
  • Scams and identity theft
• Tools for trainers (lesson plans and PowerPoint slides)
Money Matters 🁈💰🔍⚠️
How to Spot, Avoid, and Report Scams

- Credit Reports
- Buying or Renting a Home
- Avoiding a Scam When Looking for a Job
- Borrowing and Debt
- Education and Training
- Your Rights When Shopping
- Buying and Owning a Car
- Prizes and Grants

ftc.gov/MoneyMatters   ftc.gov/AsuntosdeDinero
Pass it On • Online and print materials on 13 topics • Ready to use presentations • In English and in Spanish

¡Pásalo! • ftc.gov/PassItOn • ftc.gov/Pasalo
Working together
Get and Share FREE Resources

• Sign up for Consumer Alerts:
  - **English**: ftc.gov/ConsumerAlerts
  - **Spanish**: ftc.gov/AlertasdeConsumidor
• Lean more:
  - **English**: consumer.ftc.gov
  - **Spanish**: consumidor.ftc.gov
• Get print materials:
  - **English**: ftc.gov/bulkorder
  - **Spanish**: ftc.gov/ordenar
Questions?
Thank You

Rosario Mendez

rmendez@ftc.gov
Featured Presentation:
*Combatting Consumer Fraud Through Awareness*

Michael P. Moran
United States Secret Service
Combatting Consumer Fraud

United States Secret Service
Secret Service – Consumer Fraud

July 5, 1865
The Secret Service Division was formed as a part of the Department of the Treasury.

1874
Secret Service responsibilities were broadened to include “detecting persons perpetrating frauds against the government.”

1877
Congress passed an Act prohibiting counterfeiting of any coin, gold, or silver bar.
1906
The Secret Service Division charged to investigate western land frauds.

1908
34 Secret Service agents transferred to the Department of Justice to create the FBI.

1984
Congress enacts legislation making the fraudulent use of credit/debit cards a federal violation.

1986
Congress enacts Computer Fraud and Abuse Act.
Post 9/11 Secret Service

- **October 2001** – USA PATRIOT Act directs the Secret Service to establish a network of regional cybercrime task force locations across the United States
- **March 2003** – Secret Service is transferred to the Department of Homeland Security
- **2006** – Cyber-Fraud Task Force footprint expanded to 24 field offices
- **2008** – Secret Service established the National Computer Forensics Institute dedicated to educate state and local law enforcement offices, prosecutors, and judges in cybercrime investigations
Secret Service – Consumer Fraud

1865

2023
Secret Service – Consumer Fraud

Common Types of Consumer Fraud

• Identity Theft
• Credit/Debit Card Fraud
• COVID-19 Scams
• Phishing, Vishing, & SMSishing
• Pig Butchering & Romance Scams
• Bank Frauds
• QR Codes
• Cryptocurrency & Digital Assets
• Giveaway Scams
Identity Theft

IDENTITY THEFT PREVENTION
Credit/Debit Card Fraud

• U.S. Losses over $165B over next 10 years
• $6B in losses in 2022
• 400k reports of credit card fraud in 2021
Two brothers in Marin County have been sentenced for defrauding the federal government of about $2 million in pandemic relief funds.

Caesar Ozkan of San Rafael, 67, was sentenced to 18 months in prison and ordered to pay nearly $1,493,904 in restitution.

His twin, Ester Ozkan of Novato, was sentenced to a year in prison and ordered to pay $536,036.41 in restitution and a $1 million fine.

The brothers conducted separate schemes that involved creating fictitious companies to apply for relief funds, authorities alleged. They did so through the Economic Injury Disaster Loans program and the Paycheck Protection Program, which aimed to help businesses keep workers on the books during the coronavirus crisis.

Ozkan — also known as Sezer Ozkan — submitted 27 applications for aid for fake companies with fake payroll and tax documents. The scheme netted him more than $1.7 million in government loans and advances, the prosecution said.
Secret Service – Consumer Fraud

Phishing, Vishing, & SMSishing
Secret Service – Consumer Fraud

Pig Butchering & Romance Scams
Bank Frauds

- Account Takeover
- New Account Fraud
- Money Mules
- Bank Transfer, Wire, & Zelle Scams
- Bank Impersonation Scams
Secret Service – Consumer Fraud
QR Codes

• Do not scan a randomly found QR code.

• Be suspicious if, after scanning a QR code, the site asks for a password or login info.

• Do not scan QR codes received in emails unless you know they are legitimate. Call the sender to confirm.

• Some scammers are physically pasting bogus codes over legitimate ones. If it looks as though a code has been tampered with at your local bar or restaurant, don’t use it. Same thing with legitimate ads you pick up or get in the mail.
Secret Service – Consumer Fraud

Cryptocurrency & Digital Assets

- Bitcoin | BTC
- Ethereum | ETH
- Solana | SOL
- Litecoin | LTC
- Cardano | ADA
- Chainlink | LINK
- Tether | USDT
- Monero | XMR
Giveaway Scams

Bill Gates 🌟 @BillGates · 8m
Everyone is asking me to give back, and now is the time.

I am doubling all payments sent to my BTC address for the next 30 minutes. You send $1,000, I send you back $2,000.

BTC Address - bc1qxy2kgdygjrsqtzq2n0yrf2493p83kkfjhx0wlh

Only going on for 30 minutes! Enjoy!

Elon Musk 🌟 @elonmusk
You know I living giving back to my community.

I'm doubling all BTC payments sent to my address. You send $1,000 and I will send $2,000 back!

BTC Address: bc1qxy2kgdygjrsqtzq2n0yrf2493p83kkfjhx0wlh

We are giving back to our community. We support Bitcoin and we believe you should too!

All Bitcoin sent to our address below will be sent back to you doubled!

bc1qxy2kgdygjrsqtzq2n0yrf2493p83kkfjhx0wlh

Only going on for the next 30 minutes.

2:28 · 16 Jul 20 · Twitter Web App

202 Retweets and comments 470 Likes
Artificial Intelligence Assisted Fraud:

• Expertly crafted phishing emails
• Deepfake videos
• Doctored audio
• Malware coding
• Intelligence gathering
Who can help?

• Federal
  • [www.secretservice.gov](http://www.secretservice.gov)
  • [www.fbi.gov](http://www.fbi.gov)
  • [www.cisa.gov](http://www.cisa.gov)
  • [www.ic3.gov](http://www.ic3.gov)
  • [www.ftc.gov](http://www.ftc.gov)
  • [www.identitytheft.gov](http://www.identitytheft.gov)

• State & Local Law Enforcement
  • [www.bitcoinabuse.com](http://www.bitcoinabuse.com)
  • [www.nomoreransom.org](http://www.nomoreransom.org)
Questions?

Michael P. Moran
Special Agent
US Secret Service
michael.moran@usss.dhs.gov
BREAK: EXHIBIT HALL OPEN

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Welcome Back!

Menachem Goldstein
FISSEA Co-Chair
Closing Keynote:
Humans Are Not the Weakest Link - Rethinking Cybersecurity and Digital Hygiene Education

Dr. Aunshul Rege
Temple University
Humans Are Not the Weakest Link: Rethinking Cyber Security and Digital Hygiene Education

Dr. Aunshul Rege
Director, CARE Lab
rege@temple.edu
Acknowledgements
The CARE Lab

- CARE = Cybersecurity in Application, Research, and Education

Aunshul Rege  Dr. Katorah Williams  Rachel Bleiman  Gabrielle Spence

- Human, socio-behavioral focus
- Funded by NSF + DoE/INL
- Critical infrastructure, ransomware, privacy, surveillance, disinformation, social engineering (SE), cybersecurity education

@prof_rege  @KatorahW  @rab1928  @drspenceloading
Agenda

• Why should we talk about Social Engineering (SE)?
• Traditional SE education
• Security culture
• Diversity matters
• Bringing it all together
• Closing thoughts
Why should we talk about Social Engineering (SE)?
What is social engineering (SE)?

- Manipulating human behavior/psychology to get individuals to:
  - Reveal information
  - Provide access
  - Perform an action

Why address SE?

- Consequences¹:
  - Direct financial loss
  - Recovery cost
  - Productivity loss
  - Operation disruption
  - Reputation damage
  - Emotional harms

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1 https://www.graphus.ai/blog/the-five-agonies-of-social-engineering-cyber-attacks/

---

Nonprofits: Why teach SE?

“... cybersecurity is a shared problem... when you see how the real-world works, you realize it’s all connected. You can either play in your silo and lose the battle or you can open up to new ideas and realize you can’t solve the problem by yourself”
Industry: Why teach SE?

“Social engineering has definitely gotten picked up more and more; higher profile targets have been attacked via social engineering and I think it’s a big blind spot that a lot of schools and companies don’t think about as much; they are concerned with the technical controls and not with the people controls”
Government: Why teach SE?

“Social engineering is a part of our everyday lives and we are seeing a huge uptick in misinformation and disinformation... and we don’t have a grasp on [SE] yet... and if you don’t understand it, you’re going to get hit by it”
Traditional SE education
Experiential learning

• Shoulder surfing
• Privacy, terms & conditions
• Laptop distraction
• OSINT
Ethics & SE

- University ethics training required
- Bake ethics into conversations for each project
  - FAQs
  - Table-top
  - “Don’t try something you wouldn’t want to experience”
2021 Summer SE Event: SE Pen Testing

2021 SOCIAL ENGINEERING PEN TESTING COMPETITION WINNERS

High School: 1st place!
VIMSI4 Volts

Undergraduate: 1st place!
RCC Cyber Hawks (SUNY Rockland)

Graduate: 1st place!
Trust Us (NYU Tandon School Eng.)

Undergraduate: 2nd place!
Iridescenct (University of Virginia)

Graduate: 2nd place!
Team Tay (Abertay University)

Undergraduate: 3rd place!
Night Owls (Temple University)

Graduate: 3rd place!
Tell Me Lies (Excelsior College)

CONGRATULATIONS TO ALL THE WINNING TEAMS!

FUNDERS AND SPONSORS

Google
NSF
Duo

33rd ANNUAL FISSEA CONFERENCE
2022 Summer SE Event: Ransomware + SE

2022 SUMMER SE EVENT WINNERS

High School: 1st place!
Aztec Allure (Glen A. Wilson High School)

High School: 2nd place!
ERA (Williamsville East High School)

High School: 3rd place!
Cya Alligators Expendable Forces (Carver HSES)

Undergraduate: 1st place!
Mitnicks (The University of Tennessee Knoxville)

Undergraduate: 2nd place!
FAST (California State Polytechnic University of Pomona)

Undergraduate: 3rd place!
Team Gaslight, Gatekeep, Girlboss (University of Central Florida)

CONGRATULATIONS TO ALL THE WINNING TEAMS!

FUNDERS AND SPONSORS

Temple University
Cybersecurity in Application, Research and Education Lab

NSF

Google

33rd ANNUAL FISSEA CONFERENCE
2023: Romance scams and SE

• Inspired FTC Report
  • 2021 ~ $547 million
  • 2022: $1.3 billion
• CARE Lab has been brought in to help the elderly who are falling victim to catfishing scams
  • 70+: individual median loss $9,000
  • Intergenerational emphasis

Fostering a healthy security culture
6 ways to foster a healthy security culture

1. Rethink SE training
2. Put individuals to the test
3. Create easy to understand policies
4. Make SE part of regular conversation
5. Form a questioning culture
6. Safe space for security

https://www.securitymetrics.com/learn/5-tips-train-workforce-social-engineering
1. Rethink SE training

- Ask individuals scenario-based questions about SE
- Share narratives
- Act out scenarios (interactive)
- Experiential learning
2. Put individuals to the test

• Internal SE team
• Have your own SE experiential learning events!
3. Create easy to understand policies

- Help individuals identify, assess, avoid & document
- Avoid long, legalese/jargonistic-filled documents
- Custom-design policies for different settings

![Ain't Nobody Got Time for That](https://www.visualcapitalist.com/terms-of-service-visualizing-the-length-of-internet-agreements/)

<table>
<thead>
<tr>
<th>App/Service</th>
<th>Word Count</th>
<th>How many minutes to read? (240 wpm)</th>
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<td>Uber</td>
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<td>23.6</td>
</tr>
<tr>
<td>Twitter</td>
<td>5,633</td>
<td>23.5</td>
</tr>
</tbody>
</table>
4. Make SE part of regular conversation

- Newsletters & bulletin boards
- Introduce asap
- Various settings
  - Work
  - School
  - Home
  - Shopping
  - Transit
5. Form a questioning culture

- Feel comfortable questioning:
  - Strangers
    - Ask for IDs; check with scheduled appointments
  - Protocols/purpose
    - Policies offering clarity and structure
  - Surroundings
    - Is anyone out of place?
    - Have any of the physical parameters changed?

- Challenging psychological persuasion techniques:
  - Authority; commitment; natural inclination to help
  - Always question/think through processes and situations
6. Safe space for security

- Don’t embarrass, punish, disrespect, or shame
- Teachable moments
  - What went wrong
  - How to avoid same mistakes in the future
  - Share experiences with each other
- Positive & inclusive environments
  - Desire & willingness to get more training
Diversity matters
Why diversity (different perspective) matters

- A different approach
  - Human, social, psychological, behavioral
  - Tackle a multi-faceted problem creatively
  - Leverage multidisciplinary creative potential
Why diversity (gender, race, ethnicity) matters

- Adversaries aren’t homogenous, workforce shouldn’t be either
- Global threat landscape
  - Culture, language, context
    - Innovative thinking
    - Different perspectives
Strategic partners
Bringing it all together

*Serving North Philadelphia communities*
CARE Lab’s current & future efforts

- Digital literacy/cyber hygiene
- Underserved populations
- Listen to our community partners
  - Put their needs and schedules first
- Four target populations
  - Youth
  - Elderly
  - Previously incarcerated
  - Small businesses
Programming for youth (Spring 2022)

- 12-week free virtual training program
- Various SE concepts
- 38 students across 5 Philly high schools
Programming for elderly (Fall 2022)

• Intergenerational
• Students teaching students
• Formal presentations → conversation
CYBERSECURITY DAY

In recognition of Cybersecurity Awareness Month, Temple University's Digital Equity Center, Department of Criminal Justice, and the Cybersecurity in Application, Research, and Education (CARE Lab) have partnered to host a community Cybersecurity Day! Join us at the Digital Equity Center as we discuss the following topics presented by Temple University graduate students:

- Social Engineering
- Phishing Scams
- Phishing
- Cyberbullying
- Digital Footprints and Online Reputation
- Identity Theft

Come learn more about how to keep you and your family members safe while using the Internet. Food will be provided.

Attendees will be entered into a raffle for a FREE Laptop!

Thursday, October 20th, 3 PM-5:30 PM
Temple University Digital Equity Center
1915 N. 11th Street, Philadelphia, PA 19122

To register for the event, please fill out our online form (https://forms.office.com/r/kQGx3pZ7Ev) or call us at 215-204-7445.

Temple University
College of Liberal Arts
Cybersecurity in Application, Research and Education Lab

33rd ANNUAL FISSEA CONFERENCE
Programming for all (Fall 2022)

**WHAT IS CYBERBULLYING?**

- Cyberbullying is complex, but it mainly constitutes an online or text message form of bullying.
- It can include repeated messages to an individual, posts about a person, or direct people to bully an individual in person.
- There are several types, but some of the most dangerous types are harassment and impersonation or creating fake profiles.

**The Dangers of Social Media**

- Risk of data breaches
  - The more information put out = more danger of personal privacy attacks
- Easier to spread malicious content
  - Scammers create fake posts/accounts to get you to share private information
- Location data
  - Apps can collect location data & use it for targeted ads
- Invasive privacy agreements
  - Some agreements state pictures, videos, & messages are owned by the platform

**Digital Footprint**

Any and all information you leave behind online.
Most, if not nearly all, information is stored online.

**How to Avoid Social Engineering**

- Do not trust strange emails, or phone calls if they ask you to click a link or divulge information.
- Do not immediately trust charming people, or suspected authority figures.
- Be sure to ask a supervisor, or another colleague before clicking on a strange link at work.

**Trust is Earned**

- Be Aware
- Talk Less, Smile More
- Always Double Check
Programming for all (Fall 2022)

- Intergenerational
- Students engaging with community
- Formal presentations → conversation
Programming for all (PSAs)

- 30-second PSA
  - Description
  - Relevance
  - Mitigation/Prevention
- Cybersecurity awareness month + Seasonal
  - Romance scams
  - Tax scams
  - Insurance scams
  - Holiday scams
- Classroom project
- PSA contest
2021 PSA contest – 1st place
2022 PSA contest – 1st place
Upcoming projects

Philly Community Wireless
Closing thoughts
Shared responsibility

• Educators
  • Think outside the box
  • Experiential learning with application value

• Subject matter experts
  • Government: CISA, NICE (NIST), PBGC
  • Non-profit: MITRE (ATT&CK), AARP
  • Industry: SentinelOne

• Diversity
  • Raices, Black Girls Hack, Intertribal Education Foundation

• Community
  • Digital Equity Center, Down North, Philly Community Wireless, PAR-Recycle Works
Rethink security culture & cyber hygiene education

- Safe, fun, ethical activities
- Make it relatable and easy to digest
- Welcoming and judgement free spaces
- Trust and respect for all communities
- Create community ambassadors

Everyone Wins!
Humans Are Not the Weakest Link:
Rethinking Cyber Security and Digital Hygiene Education

Thank you
Questions/comments

Dr. Aunshul Rege
Director, CARE Lab
rege@temple.edu
Closing Remarks

Menachem Goldstein
FISSEA Co-Chair
THANK YOU FOR ATTENDING
33rd ANNUAL FISSEA CONFERENCE!

We look forward to receiving your feedback via the post-event survey!

https://www.surveymonkey.com/r/2023AnnualFISSEAConference

#FISSEA2023 | nist.gov/fissea
Get Involved

Subscribe to the FISSEA Mailing List
FISSEAUpdates@list.nist.gov

Volunteer for the Planning Committee
https://www.nist.gov/itl/applied-cybersecurity/fissea/meet-fissea-planning-committee

Serve on the Contest or Award Committees for 2024
Email fissea@list.nist.gov

Submit a presentation proposal for a future FISSEA Conference or FISSEA Forum
https://www.surveymonkey.com/r/fisseacallforpresentations
SAVE THE DATE

Federal Information Security Educators (FISSEA) Summer Forum

August 23, 2023

#FISSEA2023 | nist.gov/fissea