

# Abhijit Kumar Nag, Ph.D.

Tenured Associate Professor, Subhani Department of Computer Information Systems  
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## Education

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### Ph.D. in Computer Science

December 2016.

The University of Memphis, Memphis, TN

**Dissertation:** An Adaptive Strategy towards the Selection of Authentication Factors in Multi-factor Authentication (MFA) system.

### Master of Science in Computer Engineering

August 2012

The University of Memphis, Memphis, TN

**Thesis:** Semantic-sensitive Query Expansion Method for Short-text Analytics and Mining.

## Appointments

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09/2023- present	Associate Professor, Subhani Department of Computer Information Systems, Texas A&M University-Central Texas, Killeen, TX 76549.
09/2022 – present	Department Coordinator, Subhani Department of Computer Information Systems, Texas A&M University-Central Texas, Killeen, TX 76549.
01/2017- 08/2023	Assistant Professor, Subhani Department of Computer Information Systems, Texas A&M University-Central Texas, Killeen, TX 76549.
09/2012-12/2016	Doctoral Research Assistant, Department of Computer Science, The University of Memphis, Memphis, TN 38152. Project funding agencies: IARPA (under DARPA), FEMA, and NSF.
06/2011-04/2012	Software Developer-Testing and Remediation at FedEx Services World Tech Center, Collierville, TN.

## Teaching Interest

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Cyber Security, Information Security and Risk Management, Networking Systems, Digital Forensics, Data Mining, Machine Learning, and Semiconductor Chip Design, Computer Architecture, Embedded Systems.

## Research Interest

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Computer and Network Security, Authentication Systems, Cybersecurity, Cyber-Physical Systems, Anomaly Detection, Bio-inspired Computing, Internet of Things, Semiconductor Chip Design.

## Invention Disclosure (Patent Application)

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United States Utility Patent Application  
Serial No. **14/968676**  
Patent No: **9912657**

Entitled: Adaptive Multi-factor Authentication System

Issued date: **March 06, 2018.**

In November 2019, this patent received an exclusive licensing agreement from a San Francisco based Startup company.

**Link:** <https://www.bizjournals.com/memphis/news/2019/11/26/u-of-m-research-foundation-licenses-cyber-tech-to.html>

United States Utility Patent Application

Serial No: **16/387839**

Patent No: **11038896**

Entitled: Adaptive Multi-Factor Authentication System with Multi-User Permission Strategy to Access Sensitive Information.

Issued Date: **June 15, 2021.**

URL: [https://patft1.uspto.gov/netacgi/nph-](https://patft1.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetacgi%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=11038896.PN.&OS=PN/11038896&RS=PN/11038896)

[Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetacgi%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=11038896.PN.&OS=PN/11038896&RS=PN/11038896](https://patft1.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetacgi%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=11038896.PN.&OS=PN/11038896&RS=PN/11038896)

## Teaching and Mentoring Experience

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### Texas A&M-Central Texas

- Courses taught:

CIS 3347: Data Communication and Infrastructure	Summer 2017, S 2022, S 2018-2021 (online)
CIS 3315: Website Development and Design	Summer 2018 (online)
CIS 3360: Ethics in Computing	Fall 2022
CIS/COSC 4341: IT Security and Risk Management	Spring 2017, Summer 2018 (online)
CIS 4345: Network and Systems Security	Spring and Fall 2017, Spring and Fall 2018-2022.
CIS/COSC 4378: Comprehensive Networking	Spring 2017-2024, Fall 2017-2018.
CIS 4346: Applied Security	Fall 2018-2022
COSC 3343: Computer Architecture	Fall 2017-2018, Fall 2023
CIS 4342: Computer Security Principles & Practices	Summer 2019 (online)
CIS 5302: Object Oriented Programming	Summer 2017, Spring 2019-2022.
CIS 5345: Extensible Markup Language	Fall 2019-2020 (online)
CIS 5344: Web Programming	Fall 2021
CIS 5372: Network and System Security	Spring 2023-2024
CIS 5373: Digital Forensics	Fall 2022-2023

### Teaching Training and Conference

- Completed QM Rubric Update Sixth Edition (RU) in January 2019.
- Completed the online course training on Applying the Quality Matters Rubric (APPQMR) in August 2017.
- Completed the online course training on Independent Improving Your Online Course (IYOC): (Statewide Systems) in March 2018.
- Participated in QM Connect Annual Conference at Fort Worth, TX in September 2017.
- Accepted for SEED Summer Workshop for Cybersecurity Education at Syracuse University, NY in Summer 2018 and Summer 2021.
- Completed **ACUE Effective Online Teaching Practices:** Cohort A for Fall 2021-Spring 2022 semesters.
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### Mentor of Capstone Project, The University of Memphis

- Mentored a team of four undergraduate students to complete their final-year software project (COMP 4882).
- Provided support in areas of design, analysis, and implementation of the software project, which was developed on the Android platform.
- Served as a customer for the group to provide valuable feedback throughout the development phases (alpha

and beta) of the project.

## Industry Experience

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**FedEx Services-** World Tech Center (WTC), Collierville, TN.

June 2011 – April 2012

**Employer:** Cook Systems International, Germantown, TN.

**Role:** Software Developer-Testing and Remediation.

**Project:** Shopfloor Management in Air Ops Systems Development

- Developed a customer-based solution to provide a scalable system that increased the search performance of millions of customer records in real-time.
- Integrated different modules and worked on a collaborative project with three teams to build a tailored, robust, and scalable product for FedEx Services.

## Research Experience

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**Project Title:** A Deep-Defense Approach for Next-Gen Cyber-Resilient Interdependent Critical Infrastructure Systems. [TEES funded external grant project]

**Duration:** September 2021 – August 2023.

**Responsibilities:**

- Worked as a Co-PI to design and implement a data-driven machine learning framework for cyber-resilient Interdependent Critical Infrastructure.
- Publish peer-reviewed conference and journal articles to articulate the research outcomes.
- Prepare to submit multiple federal grants (NSF, DOD, DOHS, DOE) in the 2022-2023 academic period.

**Project Title:** Powering Up: Cybersecurity Education for a Dispersed Workforce [TEES funded external grant project]

**Duration:** August 2019- August 2022

**Responsibilities:**

- Worked as a lead PI to implement an online course for entry-level military personnel and law enforcement officers.
- Conducted exploratory literature review with the current existing courses and prepare the Market Gap analysis on Cybersecurity education.
- Conducted a questionnaire survey (approved through IRB committee) in Qualtrics to get the response from law-enforcement officials and military personnel of Texas state.
- Submitting a peer-reviewed journal on Recent Cybersecurity trends and future needs in the USA.
- Preparing the concept paper(s) for federally funded grant proposal.

**Project Title:** Developing an Adaptive Multi-Factor Authentication (A-MFA) Methodology

**Duration:** September 2015- December 2020

**Responsibilities:**

- Worked as a key person to implement the prototype for adaptive selection of MFA incorporating the biometric and non-biometric authentication modalities.
- Supervised a team of one master's student and two undergraduate students regarding their assigned tasks to meet project deadlines.
- Prepared documentation for all the developed codes and the hardware sensors used to develop A-MFA.
- Worked with The University of Memphis Technology Transfer and Innovation team to design marketing flyers and business plans to commercialize implemented prototype.
- Web Link: [http://www.memphis.edu/cs/news\\_and\\_events/news/2016\\_cfia\\_student\\_highlights.php](http://www.memphis.edu/cs/news_and_events/news/2016_cfia_student_highlights.php)

**Project Title:** Act Online

**Duration:** June 2014 – August 2016

**Responsibilities:**

- Worked as a Subject Matter Expert (SME) to update the contents of courses titled, “**Cyber Incident Analysis and Response (CIAR-AWR-169)**” and “**Information Risk Management (IRM-AWR-177)**”.
- Added new content to meet the requirements of current security practices and guidelines.
- Served as a beta tester to verify the contents and check all the functionalities of developed online courses.
- Prepared course outline for an online course on Cyber Identity and Authentication.

**Project Title:** Puzzle-Based Learning**Duration:** September 2014 – August 2016**Responsibilities:**

- Worked as a team leader and a key person to develop security puzzles based on different scenarios of cyber security.
- Designed the mathematical logic that drives the different scenarios of the puzzles and gave the participants various aspects of possible solutions to a particular problem.
- Managed and supervised three undergraduate students to develop security puzzle-based games using Unreal engine and Articulate Storyline.
- Presented and demonstrated implemented puzzle-based games at the 2016 **ATE Principal Investigators Conference**, Washington, DC (October 26-28, 2016).

**Project Title:** Negative Authentication System (NAS)**Duration:** August 2012- December 2013**Responsibilities:**

- Collaborated as a leading institution with MIT Geo-Spatial Lab to implement NAS.
- Designed and implemented the algorithms for Binary, Real and Grid based representation of Negative Authentication System.
- Presented the final project demo to the funding agency in Baltimore, MD in November 2013.
- Prepared monthly progress reports being submitted to the funding agency.

**Research Publications (Since Fall 2017)**

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**Total citations: 465+.** (As of January 2024, in [Google Scholar](#)), **h-Index: 10, i-10 Index: 10.** (ORCID ID: 0000-0002-3520-2935)

**US Utility Patent**

- ✓ "Adaptive multi-factor authentication system." U.S. Patent Application **14/968,676. Issued on March 06, 2018.** [cited **21** times]
- ✓ "Adaptive Multi-Factor Authentication System with Multi-User Permission Strategy to Access Sensitive Information." U.S. Patent Application **16/387839. Issued on June 15, 2021.** [cited **3** times]

**Graduate Level Textbook**

- ✓ Dipankar Dasgupta, Arunava Roy and **Abhijit Kumar Nag**, “Advances in User Authentication”, Springer-Verlag, September 2017. (Downloaded more than **21000+ times** as of [December 2023.](#)) [has six chapters, textbook, and its chapters are cited more than **200** times]

**Peer Reviewed Journal**

- ✓ Priyanka Rani, **Abhijit Kumar Nag**, and Rifat Shahriar, A Data-Driven Classification Framework for Cyber Security Breaches, IEEE IT Professional, February 23, 2024. [Acceptance Rate: **25%, According to Cabell's ranking**]

- ✓ **Abhijit Kumar Nag**, Vikram S Bhadauria, Camille Gibson, Ram C Neupane, Daniel Creider. A Conceptual Learning Framework of Cybersecurity Education for Military and Law Enforcement: Workforce Development. Published in International Journal of Smart Education and Urban Society, September 2022. [double blind peer-review process]
- ✓ Kishor Datta Gupta, **Abhijit Kumar Nag**, Md Lutfar Rahman, M. A. Parvez Mahmud, Nafiz Sadman, “Utilizing Computational Complexity to Protect Crypto-currency Against Quantum Threats: A Review”, **IEEE IT Professional**, October 12, 2021. [Acceptance Rate: **25%**, **According to Cabell’s ranking**]
- ✓ Md Manjurul Ahsan, Kishor Datta Gupta, **Abhijit Kumar Nag**, Subash Pouyda, M A Parvez Mahmud, and Abbas Z. Kouzani, “Applications and Evaluations of Bio-inspired approaches in Cloud Security: A Review”, **IEEE Access**, October 2020 [**Q1 Journal**] [cited **21** times]
- ✓ **Abhijit Kumar Nag**, “A Survey on Computational Intelligence Techniques in User Identity Management.” Journal on Systemics, Cybernetics and Informatics (**JSCI**), Volume 17-4, 2019.
- ✓ Dipankar Dasgupta, **Abhijit Kumar Nag**, Denise Ferebee, Sanjib Kumar Saha, Kul Prasad Subedi, Arunava Roy, Alvaro Madero, Abel Sanchez, John R. Williams. Design and implementation of Negative Authentication System. **International Journal of Information Security**, November 2017. [**corresponding author**] [cited **6** times]

#### Submitted Peer-reviewed Journals

- ✓ **A Conceptual Learning Scheme of Cybersecurity Education for Military and Law Enforcement: A Framework for Cybersecurity Workforce Development** submitted under International Journal of Smart Education and Urban Society (double-blind peer-review process) [Accepted on July 30, 2022, as a first author]
- ✓ **Survey of Data-Driven Cybersecurity in Interdependent Critical Infrastructure Systems** will be submitted in Summer 2024. [IEEE or Elsevier Journal]

#### Peer-reviewed Conference Proceedings

- ✓ Eman Hammad, **Abhijit Kumar Nag**, Anitha Chennamaneni, Mohsen Aghashahi, Erdogan Dogdu, A Deep-Defense Approach for Next-Gen Cyber-Resilient Inter-Dependent Critical Infrastructure Systems, 2021 Resilience Week (RWS), October 2021.
- ✓ **Abhijit Kumar Nag** and Anitha Chennamaneni. A Survey on Emerging Trends of Cyber Threats to Academic Research, AMCIS 2020 conference, August 12-16, 2020 (TREC paper) [**282+** [downloads](#) from AIS portal].
- ✓ **Abhijit Kumar Nag**. An Adaptive Approach for an Intelligent Order Shipment Scheduling with Dynamic Warehouse Selection, 47th Annual Conference on SWDSI 2020, March 11-14, 2020.
- ✓ **Abhijit Kumar Nag** and Dipankar Dasgupta. A Survey on Computational Intelligence Techniques in User Identity Management, 23rd World Multiconference on Systemics, Cybernetics and Informatics, July 6-9, 2019. (**Received Best Paper Award**)

#### External Grant Applications

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- Submitted a single PI grant to **Texas A&M Semiconductor Institute** ([TSI](#)) to design a Digital Circuit design course to create a Chip workforce.
  - Submitted an **EDA Recompete Strategy Development** Grant as a collaborative member (PI of our institution) of the Killeen Economic Development Council Consortium on October 05, 2023.
  - Submitted an **EDA Regional Innovation and Technology Hubs Strategy Planning** Grant as a collaborative member (PI of our institution) of the **Killeen RTH Strategy Development Consortium**

on August 15, 2023.

- Submitted an external federal grant as a PI of a sub-awardee for the **NCAE-C Cyber Curriculum and Research 2020 Program** (Funding agency: Department of Defense (**DoD**), Lead institution: University of Memphis) on June 12, 2020.
- Submitted an external federal grant as a Lead Instructor (Co-PI) for the GenCyber Summer camp in 2018-2021 (Funding agency: NSF and NSA).

### Internal Grant Awards (Texas A&M System)

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- Received **2021 TEES grant** (Awarded First prize as a Co-PI) for the 2021-2023 period. Title: **A Deep-Defense Approach for Next-Gen Cyber-Resilient Interdependent Critical Infrastructure Systems. Partnering Institutions:**  
Texas A&M University-Commerce, Texas A&M University-San Antonio, and Angelo State University.
- Received **2019 TEES grant** (Awarded First Prize as a lead PI for the 2019-2022 period). Title: **Powering Up: Cybersecurity Education for a Dispersed Workforce. Partnering Institutions:**  
Prairie View A&M University; Texas A&M University-Commerce; Texas A&M University-Texarkana; and Texas A&M University-San Antonio.  
Link: <https://tarc.tamu.edu/funded-collaborations/>
- Received a university library grant in 2018 to design a curriculum for a one-hour workshop on **Password Strength Analysis** for K-12 students.

### Awards and Honors

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- Awarded the **2023 Ruqayya Faculty** Fellowship award by the **Subhani Foundation** in Spring 2023.
- Awarded **2022 COBA Excellence in Teaching** award for the 2022-2023 academic year.
- Received Faculty Course Release Award from College for conducting research in Spring 2023.
- Selected as a finalist for the 10th Annual Outstanding Research Awards Banquet in the category of **Outstanding Faculty/Staff Quantitative Scholarship Award.**
- Selected as a finalist for the 8th Annual Outstanding Research Awards Banquet in the category of **Outstanding Faculty/Staff Qualitative Scholarship Award.**
- Received the **2020 Excellence in Service** Award in the College of Business for outstanding service accomplishments in the department, college, university, and professional communities.
- Received the **2019 Scholarly Educator of COBA** award at Texas A&M University-Central Texas.
- Received **Faculty Senate Summit Scholarship Award** for peer-reviewed publications since 2020.
- Received the **2018 Education Innovation Award** from College at Texas A&M University-Central Texas.
- Received **Best Paper Award** for the conference paper titled “A Survey on Computational Intelligence Techniques in User Identity Management”, July 09, 2019.
- Accepted as a special session chair at the 19<sup>th</sup> IEEE International Conference on Machine Learning and Applications (IEEE ICMLA-2020) in Miami Florida. Url: <https://www.icmla-conference.org/icmla20/ss/SS-8.pdf>
- Accepted as a **session chair** at the 23rd World Multiconference on Systemics, Cybernetics and Informatics Conference, July 06-09, 2019.
- Accepted as a **special session(track) chair** at the IEEE CICS conference on IEEE-SSCI 2018.
- Accepted as a **Technical Program Committee** (TPC) member at the IEEE CICS conference, 2017-2018.

### Media Coverage

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- Gave a TV interview at a local news channel (KXXV) based on cybersecurity awareness and user privacy on social media applications, **July 17, 2019**. Url: <https://www.kxxv.com/hometown/bell-county/popular-faceapp-poses-cybersecurity-concerns>



- Gave a TV interview at Local news channel (KXXV) based on recent data breach incident and users' cyber awareness, **October 10, 2019**. Url: <https://www.youtube.com/watch?v=tGQtIpfMuYU>  
<https://www.tamuct.edu/news/category/faculty-staff-news/cyber-security.html>
- Gave a TV interview at Local news Channel (KXXV) based on recent Cybersecurity issues on voting machines, **October 24, 2019**. Url: <https://www.kxxv.com/news/local-news/aging-voting-machines-pose-security-threat>
- Gave a TV interview at Local News Channel (KXXV) based on Apple expansion in Texas and its impact on the Central Texas region, **November 20, 2019**. Url: <https://www.tamuct.edu/news/category/general/apple-mnfctr.html>  
<https://www.youtube.com/watch?v=fteiojP2m74>
- Local news channel (KXXV) telecasted on **January 16, 2020**, a new story that includes one of Dr. Nag's previous interviews on emerging cybersecurity issues, challenges, and current cyber trends.
- Give a TV interview at Local News Channel (KXXV) based on Cybersecurity threats on consumers during the holiday season, **November 16, 2020**. Url: <https://www.kxxv.com/hometown/bell-county/experts-warn-consumers-of-cybersecurity-threats-as-the-holidays-approach>  
<https://www.youtube.com/watch?v=cgWqWwpJ7gU>
- Give a TV interview at Local News Channel (KXXV) on Online Tax Season Cybercrime and User Identity, **January 23, 2021**. Url: <https://www.youtube.com/watch?v=jTTOJpeuank>  
<https://www.kxxv.com/news/tax-season-is-right-around-the-corner-a-time-when-hackers-could-steal-your-identity>
- Give a tv interview at Local News Channel (KXXV) on computers provide children access to technology on **April 29, 2021**. Url: <https://www.kxxv.com/hometown/bell-county/anonymous-donation-of-400-computers-will-give-foster-children-access-to-technology>
- Give a tv interview at Local News Channel (KXXV) on Colonial Pipeline Ransomware attacks on **June 10, 2021**.
- Give a TV interview at local news channel (KWTX) on mortgage scams targeting VA home loans on **July 18, 2021**. Url: [https://www.kwtx.com/2021/07/18/new-scams-are-targeting-va-home-loans/#:~:text=TEMPLE%2C%20Texas%20\(KWTX\)%20%2D,for%20VA%20guaranteed%20home%20loans.&text=They're%20also%20using%20fear,or%20they%20owe%20late%20fees](https://www.kwtx.com/2021/07/18/new-scams-are-targeting-va-home-loans/#:~:text=TEMPLE%2C%20Texas%20(KWTX)%20%2D,for%20VA%20guaranteed%20home%20loans.&text=They're%20also%20using%20fear,or%20they%20owe%20late%20fees)
- Give a TV interview at local news channel (KWTX) on successful Cyber Monday shopping on **November 29, 2021**. Url: <https://www.kwtx.com/2021/11/29/experts-offer-tips-successful-cyber-monday-shopping/>
- Give a TV interview at local news channel (KWTX) on cryptocurrency mining on January 25, 2022. Url: <https://www.kwtx.com/2022/01/25/decrypting-crypto-how-bitcoin-is-mined/>  
This same story was picked up by two other news stations.  
<https://www.ktre.com/2022/01/25/decrypting-crypto-how-bitcoin-is-mined/> and <https://www.kltv.com/2022/01/25/decrypting-crypto-how-bitcoin-is-mined/>
- Give a TV interview at KWTX Channel 10 on Concerns over Cyberattack grow due to current situation on February 24, 2022. URL: <https://www.kwtx.com/2022/02/25/concerns-over-cyberattacks-grow-russia-invades-ukraine-us-levies-sanctions/>
- Give a TV interview at local news channel KXXV on Cyberattack Threats in recent events on February 25, 2022. Url: <https://www.youtube.com/watch?v=wH DUoIbaW4Y>
- Give a TV interview at local news channel KXXV on the Smart App launch for Killeen, TX on April 29, 2022.
- Give a TV interview at local news channel KXXV on **2022 Cybersecurity Camp** on June 08, 2022. Url: <https://www.youtube.com/watch?v=dpXsrWyK-yY>  
<https://www.kxxv.com/hometown/bell-county/free-cybersecurity-summer-camp-offered-to-high-school-students-in-central-texas>
- Give a TV interview at local news channel KXXV on SpaceX Satellites in Texas on September 13, 2022. Url: <https://www.kxxv.com/hometown/mclennan-county/string-of-lights-over-night-sky-in-waco-believed-to-be-spacex-satellites>
- Give a TV interview at local news channel KXXV on Spam Text message rise issues on October 10, 2022. Url: [https://www.youtube.com/watch?v=8JDEViNb\\_t8](https://www.youtube.com/watch?v=8JDEViNb_t8)

Yahoo! News also picked up this news story:

<https://news.yahoo.com/spam-texts-rise-t-says-223411191.html>

- Give a TV interview at local news channel KWTX Channel 10 related to alarming trends of threats using the Airdrop feature. Url: <https://www.kwtx.com/2022/10/21/central-texas-school-district-warns-parents-about-alarming-trend-involving-threats-sent-via-airdrop/>
- Give a TV interview at local news channel KCEN Channel 6 related to banning the TikTok app on December 16, 2022. Url: <https://www.kcentv.com/article/news/local/us-senate-passes-bill-banning-tiktok-on-federal-employee-phones-house-to-vote-next-on-whether-or-not-the-ban-will-stand-with-nationwide-ban-up-in-air/500-4877acc9-11aa-4024-b42d-b79bdc8c0d55>
- Give a TV interview at local news channel KXXV Channel 25 related to drones on video surveillance on March 27, 2023. Url: <https://www.kxxv.com/news/killeen-police-using-fleet-of-drones-to-solve-prevent-crime>  
[https://www.youtube.com/watch?v=Eh0C\\_u283FA](https://www.youtube.com/watch?v=Eh0C_u283FA)
- Give a TV interview at local news channel KWTX Channel 10 related to cybersecurity issues of CashApp on December 5, 2023. Url: <https://www.kwtx.com/2023/12/06/local-organization-loses-6000-cash-app-fraud-activity/>
- Give TV interviews at two local news channels (**KXXV Channel 25** on 1/22 and **KCEN Channel 6** on 1/25) on how to protect identities while filing taxes online in 2024. URL: <https://www.kcentv.com/article/news/local/stay-safe-cyber-attacks-tax-season/500-5d4b4472-5725-4057-8bed-e3f6253c62b9>
- Give a TV interview at local news channel (KCEN Channel 6) on how to guide your kids in using social media platforms. It is also aired on several other local news channel. URL: <https://www.kcentv.com/article/news/community/20-years-of-facebook-taking-a-look-at-the-evolution-of-facebook-and-where-it-began-kcen-kags/500-5cb5d274-7278-4b83-be24-f98a9c9874fa>
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## Invited/Accepted Research Talk

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- Presented an invited talk on Breaking the Barrier: *Diverse ICT Research and Future Opportunities in Industry and Academia* at 10<sup>th</sup> International Conference on Networking, Systems and Security on December 21, 2023.
- Presented an invited talk on *Password Security and Authentication techniques* at Killeen ISD Career Center, Killeen, TX (October 11, 2018).
- Presented a tutorial on a topic titled “*Computational Intelligence in User Identity Management*” at IEEE SSCI 2017 conference at Honolulu, Hawaii (November 28, 2017).
- Research Colloquium talk on “*An Adaptive Multi-Factor Authentication System- Design and Implementation*” at Computer Science department, Baylor University, Waco, TX (November 17, 2017).
- Presented Cybersecurity Puzzle Based Learning project on **National Initiative for Cybersecurity Education** (NICE) K-12 Subgroup Meeting on November 09, 2016.

## Professional Service

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### 1. Guest reviewer for peer-reviewed well-reputed journals

- European Journal of Operational Research (**EJOR**) (2014- )
- Evolutionary Computation Journal (**ECJ**) (2014-)
- Elsevier Journal of Computers & Security (**COSE**) (2014-)
- Information Sciences (**INS**) (2014-)
- Soft Computing (**SOCO**) (2017-)
- Wireless Communications and Mobile Computing (2018 -)

### 2. Reviewer of the peer-reviewed conferences

- IEEE Access (2020-)
- IEEE International Conference on Machine Learning and Applications (**ICMLA**) (2020-)



- Americas' Conference on Information Systems (**AMCIS**) (2020-)
  - Cognitive Science Society (**COGSCI**) (2020-)
  - European Conference on Information Systems (**ECIS**) (2020-)
  - World Multi-Conference on Systemics, Cybernetics, and Informatics (**WMSCI**) (2015-)
  - IEEE Symposium Series on Computational Intelligence (**SSCI**) (2015-)
  - Hawaii International Conference on System Sciences (**HICSS**) (2016-)
  - IEEE **INFOCOM** (2017- )
  - IEEE International Conference on Computing, Networking, and Communications (**ICNC**) (2017- )
  - IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (2017 -)
3. Reviewer of various **textbook chapters** published by Prospect Press in 2019-2020.  
The book title: **Web Development with ASP.NET, C#, HTML, CSS, and Bootstrap**.  
Chapter: **4, 5, 7, 11, 13, 14, and 15**.
  4. Professional Member, Institute of Electrical and Electronics Engineers, Inc. (**IEEE**), 2017- present.
  5. Professional Member, Association of Computing Machinery (**ACM**), 2017 – present.
  6. **Department Co-Ordinator** for CIS since Fall 2022 to assist student advising, student hiring, undergraduate program assessments and degree equivalency checking.
  7. **Faculty Senate Member**, Texas A&M University-Central Texas, **2018-2020** and **2020-2022** period.  
Currently serving in **Faculty Affairs** sub-committee in the senate (2018-2020 and 2020-2022) and **Budget** sub-committee (2020-2022).
  8. Member of College Level Promotion and Tenure Committee for 2023-2024 academic session.
  9. **COBA** Undergraduate Curriculum and Assessment Committee co-chair Fall 2021-Summer 2023 (key contact person for BS and BAAS degree programs).
  10. **COBA** member of Next Generation Distance Learning Classroom committee since Spring 2021.
  11. **COBA** Faculty Qualification Document Preparation Committee in May 2021.
  12. Member of Accreditation and Strategic Planning Steering Committee (2020-2022), College of Business, Texas A&M University-Central Texas.
  13. At-Large Faculty Member of **Enterprise Applications Steering** committee (2018-2019), Texas A&M University-Central Texas.
  14. Academic Program Review Follow-up Committee (2017), Texas A&M University-Central Texas.
  15. Participated in **QEP High Impact Practices** focus group for Institutional Research and Assessment, July 2021.
  16. Participated and evaluated **72 syllabi** as part of **QEP WI Syllabus Review 2020** for Institutional Research and Assessment, July 2020.
  17. Participated in a Webinar “**Digital Measures by Watermark: Annual Review Reporting**” on January 20, 2021.
  18. Participated in **Undergraduate Student Recruitment Sessions** for CIS department on August 3<sup>rd</sup>, 2020 (two sessions).

19. Participated **Active Shooter training** session at Texas A&M University-Central Texas on September 10, 2019.
20. Member of University's **Website Development Advisory Committee**, Texas A&M University-Central Texas since Spring 2018.
21. Member of **COBA Curriculum Committee** since Spring 2019 and assist in the approval process of courses or programs of three departments in the College of Business.
22. Completed **Faculty Recruitment Training** from HR office on October 30, 2019.
23. Member of **Tenure-track Assistant/Associate Professor Hiring** Committee for the CIS department since Fall 2019.
24. Member of **Visiting Assistant Professor/Lecturer** Hiring Committee for the CIS department in Summer 2020 and 2021.
25. Participated in ***Importance of Peer Review and Data Validation in Research*** Webinar organized by CITI training on July 22, 2020.
26. Participated in ***ABCSP*** organized **Teaching Effectiveness Webinar: Course Learning Outcome Revision and Mapping** Webinar on April 29, 2020.
27. Participated in **QM East Regional Online Conference** on April 24, 2020.
28. Participated in **QM West Regional Online Conference** on April 03, 2020.
29. Participated in Faculty Training for **New Student Self Service (SSB9)** on March 16, 2020.
30. Attended **Proctorio Training - Proctored Testing** using Google Meet on May 28, 2020.
31. Visited local software company (***MilMedia, Inc*** in Killeen, TX) to discuss about potential internship opportunities for current students of CIS department with department chairperson (January 28, 2020).
32. Participated in ***"Respondus 4.0 and Test Bank Network: Quickly update Create Online Exams"*** (online training session) on February 4, 2020.
33. Visited Killeen ISD high school to share information about Cybersecurity Awareness and training as well as GenCyber grant program initiatives. (October 5, 2018)
34. Participated in ***"We END Violence"*** workshop at Texas A&M University-Central Texas in March 2017.
35. Participated in **Technology Enhanced Learning** Session by Steven Hill on September 12, 2017 and September 11, 2019.
36. Participated in Accessibility Panel Discussion in October 2017 and October 2019.
37. Participated in ***Advisor Training: Advising Students*** on October 24, 2017.

38. Participated as a member of a steering committee of a national initiative on *Digital Polarization: A Project to Promote Online Civic Information Literacy* since March 2018.
39. Participated in “*Student Schedule Planner Demo*” from Register Office on March 20, 2018.
40. Represented Computer Information Systems (CIS) department at **Warrior Preview Day** on February 10, 2018, May 30, 2019 and October 12, 2019.
41. Participated in *Concur Full Demo Training* on February 15, 2018.
42. Participated in *Copyright Panel Meeting* by Dr. Lisa Bunkowski on January 30, 2018.
43. Advising BS-Computer Science students regarding their course curriculum planning, course substitution and advanced elective selections from **Spring 2018**.