

Usman Haider

Nationality: Pakistani | Phone/WhatsApp Number: (+92) 315 684 2063

Email address: usmanhaider@ieee.org | usmanhaider827@gmail.com

LinkedIn: www.linkedin.com/in/usmanhaider4772/

ResearchGate: https://www.researchgate.net/profile/Usman-Haider-22

OBJECTIVE

An organized and motivated person, capable of problem-solving and working under pressure in all environments. Seeking professional opportunities to groom my research, technical, and interpersonal abilities.

EDUCATION

20/08/2019 - 13/06/2023 Peshawar, Pakistan

BACHELOR OF SCIENCE (ELECTRICAL ENGINEERING) National University of Computer and Emerging Sciences (NUCES)

Website: https://nu.edu.pk/ | Major: Telecommunication | Thesis: Secure VPN Gateway with Pi-Router

Final grade: 3.70/4.0

PUBLICATIONS

International Journal Paper Publications

J1. <u>An Intelligent Machine Learning-based Intrusion Detection System (IDS) for Smart Cities</u>
Networks – 2023

Muhammad Yaseen Ayub¹, **Usman Haider²**, Ali Haider³, Muhammad Tehmasib Ali Tashfeen⁴, Hina Shoukat⁵, and Abdul Basit⁶, EAI Endorsed Transactions on Smart Cities.

J2. <u>Detection of Cyber Attacks using Machine Learning based Intrusion Detection System for IoT</u>

Based Smart Cities – 2023

Maria Nawaz Chohan¹, **Usman Haider**², Muhammad Yaseen Ayub³, Hina Shoukat⁴, Tarandeep Kaur Bhatia⁵, and Muhammad Furqan Ul Hassan⁶, EAI Endorsed Transactions on Smart Cities.

J3. Intrusion Detection System for IoT Platforms Using Machine Learning Algorithms – 2023 Muhammad Tehmasib Ali Tashfeen¹, Muhammad Yaseen Ayub², **Usman Haider³**, Tarandeep Kaur Bhatia⁴, Syeda Ghanwa Tawaseem⁵ and Muneeb Ahmed Ayub⁶, EAI Endorsed Transactions on Internet of Things. (Submitted)

In Conference Proceedings

- C1. Optimized Machine Learning Techniques to Detect Cyber-Attacks in IoT-Networks 2022

 Muhammad Yaseen Ayub¹, Usman Haider², Ali Haider³, Muhammad Tehmasib Ali Tashfeen⁴, Hina Shoukat⁵ and Abdul Basit⁶, In International Conference on Trends and Innovations in Smart Technologies (ICTIST) 2022.
- **C2.** <u>Intrusion Detection System for IoT Infrastructure</u> 2022

Muhammad Tehmasib Ali Tashfeen¹, Muhammad Yaseen Ayub², **Usman Haider**³, Tarandeep Kaur Bhatia⁴, Syeda Ghanwa Tawaseem⁵ and Muneeb Ahmed Ayub⁶. In International Conference on Trends and Innovations in Smart Technologies (ICTIST) 2022.

C3. <u>Smart Cities Enabled Machine Learning Based Intrusion Detection System for IoT-Networks</u> – 2022

Maria Nawaz Chohan¹, **Usman Haider**², Muhammad Yaseen Ayub³, Hina Shoukat⁴, Tarandeep Kaur Bhatia⁵ and Muhammad Furqan UI Hassan⁶. In International Conference on Trends and Innovations in Smart Technologies (ICTIST) 2022.

C4. Secure VPN Gateway With Pi-Router – 2023

Usman Haider¹, Qanmber Ali², Gunjan Chhabra³, Keshav Kaushik⁴, Suleman Mir⁵, and Rizwan Hanif⁶. In IEEE International Conference on Image Information Processing (ICIIP-2023).

Book Chapter Publications

- **B1.** Cyber Attack Detection Analysis using Machine Learning for IoT Based UAV-Network 2023 Usman Haider¹, Hina Shoukat², Muhammad Yaseen Ayub³, Muhammad Tehmasib Ali Tashfeen⁴, Tarendeep Kaur Bhattia⁵, and Inam Ullah Khan⁶, In Cyber Security for Next Generation Computing Technologies.
- **B2.** Al-based Secure Wireless Communication Techniques and Cyber Threats for IoT Networks 2023

Usman Haider¹, Bakhtawar Nawaal², Inam Ullah Khan³, Salma El Hajjami⁴, In Cyber Security for Next Generation Computing Technologies.

B3. Signature-Based Intrusion Detection System for IoT – 2023

Bakhtawar Nawaal¹, **Usman Haider²**, Inam Ullah Khan³, Muhammad Fayaz⁴, In Cyber Security for Next Generation Computing Technologies.

- **B4.** Intelligent Transportation Systems for IoT-Based UAV-Networks and Cyber Attacks 2023

 Mamoona Jamil¹, Usman Haider², Inam Ullah Khan³, Tarandeep Kaur Bhatia⁴, In Cyber Security for Next Generation Computing Technologies.
- **B5.** The Benefits and Risks of Artificial General Intelligence (AGI) 2023

 Muhammad Fahad¹, Tayyaba Basri², Muhammad Ameer Hamza³, Sheikh Faisal⁴, Abdullah Akbar⁵, **Usman Haider**⁶ and Dr. Salma El Hajjami⁷. (Accepted)

REVIEWER

- R1. Journal of Healthcare Engineering, Hindawi
- R2. Wireless Communications and Mobile Computing, Hindawi
- R3. Security and Communication Networks, Hindawi
- R4. Computers, Materials & Continua, CMC
- **R5.** Journal of Super Computing, Springer

PROJECTS

01/09/2022 - 01/06/2023

Secure VPN Gateway with Pi-Router (FYP)

OpenWrt OS installed on Raspberry Pi. Pi-Router was built using the following Raspberry Pi and it was configured accordingly. An EC2 instance was initialized on AWS Console with OpenVPN AMI and configured accordingly. After encryption, a VPN connection was created by redirecting all the network traffic to AWS. Thus, our traffic does not reach the internet directly and remains encrypted & secure.

15/09/2021 - 20/01/2022

IoT-based Patient Health Monitoring System using Arduino

This prototype measured the temperature and heart rate of the patient and uploaded it on an online IoT

platform (ThingSpeak). This prototype also contained a panic button that was designed to send an email in the case of an emergency.

WORK EXPERIENCE

07/11/2023 - Present Lahore, Pakistan

GRC Analyst PROGRAMMERS FORCE (PVT.) LIMITED

- Worked for Sufti Pro Limited (UK) as a contractor.
- Expertly handled compliance with frameworks like ISO 27001:2022, SOC 2 Type II, PCI DSS 4.0, and Cyber Essentials Plus.
- Assessed and improved adherence to data privacy laws such as GDPR and CCPA within the organization.
- Conducted multiple gap assessments and internal audits to ensure compliance with standards.
- Played a key role in developing and reviewing policies, aligning them with framework guidelines and maintaining document control procedures. Played a key role in classifying all information assets.
- Customized and delivered security awareness training sessions for different departments, and conducted assessments to measure their effectiveness and identify areas for improvement.
- Used advanced tools like Vanta, Qualys, and SimpleRisk for smooth compliance, vulnerability, and risk management, ensuring 100% compliance.
- Conducted risk assessments to identify and mitigate potential security threats, and maintained the risk register.
- Effectively communicated and collaborated with cross-functional teams to achieve security goals.

Department: Information Security

03/07/2023 - 20/08/2023 Chicago, United States

CYBERSECURITY INTERN (REMOTE) CYBER MANAGED SERVICES INC. (CYBERMSI)

- Worked on Microsoft Sentinel, Azure Entra ID, MS 365 Defender, and Defender for Endpoints for enhanced threat detection.
- Acquired an in-depth understanding of incident management methodologies.
- Did incident forensics for various incidents and deeply monitored user/device logs for threat detection.
- Acquired the skill of expeditiously resolving incidents while adhering to Service Level Agreements (SLAs).
- Dealt with multiple customer environments and experienced 24x7 rotating shifts.

Department: Operations

18/07/2022 - 27/08/2022 Pakistan

INTERN SUPERNET LIMITED ISLAMABAD

- Gained foundational knowledge of diverse security solutions and associated vendors.
- Acquired insights into ERPs, Tenders, and Compliance frameworks.
- Grasped fundamentals of RF Mapping, Link Budgeting, and Satellite Communication.
- Contributed to the preparation of Security Tender Documentation.

Department: Sales

15/09/2020 - 10/02/2021 Peshawar, Pakistan

TEACHING ASSISTANT NATIONAL UNIVERSITY OF COMPUTER & EMERGING SCIENCES

- Assigned with Physics course.
- Checked assignments assigned and quizzes taken from students.
- Took extra classes for topics that my professor was unable to cover in a short span of class period.

RESEARCH ASSISTANT CENTER FOR EMERGING SCIENCES, ENGINEERING & TECHNOLOGY (CESET)

- Acquired knowledge of diverse research methodologies.
- Developed proficiency in scientific research writing.
- Gained practical skills in LaTeX and established a foundational understanding of Python.
- Actively engaged with cutting-edge technologies, including IoT, intrusion detection systems, machine learning, and security attacks.

VOLUNTEERING EXPERIENCE

[01/03/2021 - 01/01/2024 Islamabad]

Student Representative, IEEE Islamabad Section

- Led a team as an Official ExCom Member of IEEE Islamabad Section, driving goal achievement in IEEE Peshawar Sub-Section.
- Contacted university representatives to coordinate activities and enhance communication.
- Executed sectional plans, contributing to successful implementation.
- Presented about IEEE in seminars and sectional meetings.

[10/03/2021 - 01/06/2023 Peshawar]

Student Coordinator, PEC-CPD Activities - FAST NUCES

- Managed entire CPD workshops.
- Maintained complete communication with Guest Speakers as well as with participants during the registration process.
- Did pre/post documentation of the workshop.

[01/01/2021 - 30/06/2023 Peshawar]

Volunteer - IEEE Student Branch NUCES Peshawar

- Volunteered in various positions i.e., Mentor, Vice Chair, Publication Manager, and Junior Representative.
- Changed the status of the student branch from dormant to active.
- Designed policies for volunteers to acquire full advantage of IEEE.
- Led the flagship event of IEEE Islamabad Section, SAC Leadership Summit 2022 at my campus successfully.

INTERNATIONAL CERTIFICATION

01/04/2023 - 31/03/2026

ISC2 Certified in Cybersecurity (CC)

Certification ID: 1183483

18/10/2023 - CURRENT

ISO/IEC 27001 Information Security Associate by SkillFront

Certification ID: 49596455741535

18/10/2023 - CURRENT

arcX Cyber Threat Intelligence 101

Certification ID: 221a969543fa162ecac6afd76ac99d6190cf1335

PROFESSIONAL TRAINING

General Data Protection Regulation (GDPR) — Alison

- The GRC Approach to Managing Cybersecurity Coursera
- "Jr. Penetration Tester Career-Path" TryHackMe
- "The GRC Approach to Managing Cybersecurity" Coursera
- Cybersecurity Analyst Training Fall 2023 Leading Edge Skills, Los Angeles, United States
- IEEE Volunteer Leadership Training (VoLT) Program Class of 2023 IEEE
- "ISO 27001 Lead Auditor Training" Advisera
- "Cyber Security Management Virtual Experience Program" ANZ Australia (Forage).
- "Cybersecurity Engineering Virtual Internship Program" SAP USA (Forage).
- "NDG LINUX Essentials" Cisco Networking Academy.
- "Certified Network Security Specialist (CNSS)" the International Cyber Security Institute, UK
- "Introduction to IT & Cybersecurity" Cybrary
- "Introduction to Cybersecurity" Cisco
- "Hand-on exercise on Python" Coursera

LANGUAGE SKILLS

Mother tongue(s): URDU, SARAIKI

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	C1	B2

Level A1 and A2: Basic users; B1 and B2 independent user; C1 and C2: Proficient user

IELTS overall score: 7.0 or C1

• TECHNICAL PROGRAM COMMITTEE MEMBER

C1. International Conference on Trends and Innovations in Smart Technologies (ICTIST) 2022

HONOURS AND AWARDS

- Batch Gold Medalist National University of Computer and Emerging Sciences.
- **Cum Laude Appreciation** National University of Computer and Emerging Sciences.
- **Dean's List of Honor Award** National University of Computer and Emerging Sciences I acquired this award 6 times for securing a semester GPA of more than 3.5.
- **Registered Engineer** Pakistan Engineering Council (PEC)
- Best Student Volunteer Award 2022 IEEE Islamabad Section.
- IEEE 5-Year Membership Milestone IEEE.
- Semi-Finalist "The Great Debate" 2020 by British High Commission Islamabad.
- **District Member (2020-21)** National Youth Assembly Pakistan.
- Runner up (Table Tennis) Inter-Collegiate Boys Sports Tournament 2016, BISE Sargodha.

CONFERENCES AND SEMINARS

18/08/2021 - 25/09/2021 - Remote

IEEE Region 10 Young Professionals Career & Leadership Aid Program (CLAP) 2021 – I represented the IEEE Islamabad Section as a delegate.

27/08/2021 - National University of Science and Technology (NUST) Islamabad, Pakistan

IEEE Islamabad Section SAC Leadership Summit 2021

27/02/2022 - 28/02/2022 - Royalton Hotel Faisalabad, Pakistan

IEEE Pakistan Students/YP/WIE/SIGHT Congress 2021 (PSYWSC-21)

11/12/2021 - 12/12/2021 - Pakistan Institute of Engineering & Applied Sciences (PIEAS) Islamabad, Pakistan

IEEE Islamabad Section Students/YP/WIE/SIGHT Congress 2021 (ISYWSC-21)

04/06/2022 - National University of Computer and Emerging Sciences, Islamabad, Pakistan (Peshawar Campus)

IEEE Islamabad Section SAC Leadership Summit 2022 — I volunteered as "Event Lead" for this one-day event that consisted of technical & non-technical talks and socials.

02/12/2022 - 03/12/2022 - National University of Computer and Emerging Sciences, Islamabad, Pakistan

IEEE Islamabad Section Students/YP/WIE/SIGHT Congress 2022 (ISYWSC-22).

07/10/2022 - 08/10/2022 - London, UK

International Conference on Trends and Innovations in Smart Technologies (ICTIST) 2022 – Joined this conference as an Author remotely.

20/10/2023 - 22/10/2023 - COMSATS University Islamabad, Pakistan

IEEE Pakistan Students/YP/WIE/SIGHT Congress 2023 (PSYWSC-23)

22/11/2023 - 24/11/2023 - Himachal Pradesh, India

7th International Conference on Image Information Processing (ICIIP) 2023 – Joined this conference as an Author remotely.

DIGITAL SKILLS

SKILLS: IS Auditing, Policy Writing, Risk Management, Incident-Management, Threat Hunting, Incident Documentation, Research Writing Communication & presentation.

TOOLS: Vanta, Qualys, SimpleRisk, Microsoft Sentinel, Microsoft365 Defender, MS Azure, Azure Active Directory, MS Intune, Threat intelligence platforms, Nessus, Wireshark, Nmap, Canva, Adobe Illustrator and LaTeX/Overleaf.

LANGUAGES: C++, Python, MATLAB, KQL, Bash.

GENERAL: MS Office, All versions of Windows, LINUX, MacOS.

REFERENCES

Will be provided upon request.