ABTSEGA TESFAYE CHUFARE

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SUMMARY

With a strong passion for cybersecurity, machine learning, and cloud computing. Experienced researcher, innovative problem solver, and dedicated mentor with international exposure, recognized publications, and a commitment to driving technology.
Research Interest: Advanced cybersecurity protocols, machine learning-based anomaly detection for threat identification, secure cloud computing architectures, and AI-driven security in IoT systems.

EDUCATION

Kalinga Institute of Industrial Technology, Bhubaneswar, India.   *Sep 2021- May 2025*
B.Tech. in Computer Science and Engineering

ALX AFRICA | [Certificate](#)   *Mar 2022- Mar 2023*

Certificate Bootcamp in Software Engineering(Backend Specialization)

Credly Professional digital Achievements | [Transcript](#)   *Dec 9 2024*
Digital Certificates in Different Fields USA

RESEARCH EXPERIENCES

Research Assistant, KIIT IOT Lab   *March 2022 - Present*
Kalinga Institute of Industrial Technology University, India.
- Assisting in the development and testing of IoT-based solutions, contributing to research projects focused on smart device integration and data collection while utilizing sensors and cloud technologies.

Research Associate, AI-Driven Network Security Project   *May 2022 - Sep 2024*
Cambridge Scholar, ICDCIT, DOSIER 2024, India.
- Published findings in peer-reviewed journals and presented results at international conferences.

Academic Tutor & Undergrad Research Mentor   *June 2022- Sep 2024*
Department of Computer Engineering, KIIT University, India.
- Guided and mentored undergraduate students in research projects, providing academic tutoring in AI and Security driven topics and supporting their development in technical skills, and research methodologies.

Work EXPERIENCE

Global Software Solution Consultant (Intern)   *Dec 5 - Present*
Chaitanya Enterprise, India : Remote | [OfferLetter](#)
- Assisted in providing software solutions to global clients by analyzing business requirements, customizing applications, and offering technical support, while gaining hands-on experience in software development.

AI & Cybersecurity Summer Internship   *Aug 2024 - Sep 2024*
University of Turku, Finland | [OfferLetter](#) | [Certificate](#)
- Provided after-sales technical support to customers to guarantee the efficiency of products and customer satisfaction.

Infotech Intern   *May 2023 - July 2023*
Cyber Secured India -Prodigy Infotech, India | [OfferLetter](#) | [Certificate](#)
- Contributed to enhancing cybersecurity measures for clients by identifying vulnerabilities, implementing security solutions, and assisting in the development of security protocols.

Remote Data Annotator   *Apr 2022 - Sep 2023*
Outlier/Remotask, USA
- Performed data annotation tasks remotely, assisting in labeling and categorizing large datasets for machine learning models, ensuring accuracy and consistency while contributing to the development of AI-driven applications.

PUBLICATION

- Co-Author, Chapter 3:*[Cybersecurity Imminent Threat with Solutions in Higher Education*],   *June 2023*
in Recent Trends in Intelligence Enabled Research: Selected Papers of Fourth Doctoral Symposium, DOSIER 2022. **Springer** Nature Singapore, 2023, ISBN: 9789819914722, 9819914728 [springer](#) [GoogleBooks](#)
- Co-Author, Chapter 3:*Human-Centric Frameworks: Unraveling the Social Dynamics of Emerging   *August 2024*
Threats*], Role of Emerging Technologies in Social Science: Published in **Cambridge Scholar**, United

Kingdom, 2024 ISBN: 9781036409531, 1036409538 | cambridgescholar GoogleBooks
- Edge Computing Resource Allocation Using Game-Theoretic Voting System. Submitted to **IEEE** (Under Review) Conference
- Real-Time Anomaly Detection Using Serverless Big Data Analytics: Review, Submitted to Elsaviour (Under Review)

PROJECTS

Malware Detection and Analysis using Machine Learning | Github   *Python, Scikit-Learn, TensorFlow*
- designed and implemented a machine learning model to detect and analyze malware by extracting features from executable files, achieving 93% improved detection accuracy

Multi-Lingual Youtube Video Summarizer using LLAMA3 | Github   *Python, LLAMA3 API, NL Toolkit*
- Developed a multilingual YouTube video summarizer leveraging LLAMA3 to generate concise summaries across various languages like Amharic, Greek, Chinese, Hebrew, Spanish, etc.

Secured QR-Code Library Attendance System | Github   *Javascript, QR Code Authenticator,*
- Developed a secure QR-code-based library attendance system to streamline check-in/check-out processes while ensuring data integrity and user authentication.

Intrusion Detection System using Snort | Github   *Snort, Linux(Ubuntu), Wireshark*
- Implemented an intrusion detection system using Snort to monitor and analyze network traffic for malicious activity, enhancing network security and providing real-time alerts for potential threats.

Scalable Web Application on AWS using EC2 | Github   *AWS EC2, Nginx, Docker*
- Developed a scalable web application hosted on AWS using EC2 instances, ensuring high availability and performance by configuring auto-scaling, load balancing, and secure access, enabling efficient utilization

CERTIFICATIONS

Google & Microsoft Cybersecurity & IT Support Professional Certificates **1 2 3**
CISCO CCNA Networking Certificates **1 2 3**
Machine Learning on Google Cloud Specialization Certificates **1 2**
Application Security for Developers and DevOps Professionals Certificate **1 2 3 4**

SKILLS

Soft skills: Critical thinking, Problem-solving skills, teaching skills, Research Skills, Emotional Intelligence, Ability to adapt to new processes and technology, Excellent written and communication skills, Excellent Leadership and organizational abilities.

Technical skills: Python, JavaScript, C++, AWS, Google Cloud, TensorFlow, PyTorch, Scikit-learn, Snort, Wireshark, Metasploit, Git, GitHub, Agile, Docker, Pandas, NumPy, TCP/IP, DNS, VPNs, firewalls, Researching, Proof-writing.

AWARDS AND RECOGNITIONS

- Best research paper at the Doctoral Symposium on Intelligence Enabled Research (DOSIER) | Certificate
- Participation in national hackathon on cybersecurity, conducted in joint effort of ICDCIT and Springer | Certificate
- Silver Honor for International Youth Math and Astronomy Competition 1 2

ACADEMIC MEMBERSHIP AND AFFILIATION

- Member of International Conference on Distributed Computing and Intelligent Technology (ICDCIT)
- Member of International Information System Security Certification Consortium(ISC2) | Certificate

ACADEMIC POSTERS AND CONFERENCE

- Presented a paper on Doctoral Symposium on Intelligence-Enabled Research 2022 | Certificate
- Presented a paper on my research project titled "-----"

LEADERSHIP EXPERIENCE

Team Leader, Research Collaboration & Hackathons   *Apr 2023 – Oct 2024*
- Coordinated multi-institutional research & hackathons on machine learning applications and cybersecurity.

Team Leader, International Students Society | Certificate   *June, 2022 – July, 2023*
- Spearheaded initiatives to enhance the integration of international students into university life. Organized 10+ cultural events, increasing international student participation by 30%