CHAITANYA KUMAR SAHU
+91 8309869017 | chaitanyakumarsahu00@gmail.com |
https://www.linkedin.com/in/chaitanya-kumar-sahu |
Location: Visakhapatnam, Andhra Pradesh

PROFESSIONAL SUMMARY

Highly motivated B.Tech Computer Science student with a strong foundation in Cybersecurity and Quantum Computing, demonstrated through two hands-on cybersecurity internships and a cutting-edge Hackathon project. Proficient in Python, Java (Basics), web technologies, and security tools (Nmap, Metasploit, Burp Suite), along with quantum programming (Qiskit). Eager to leverage strong analytical and problem-solving skills in an entry-level software development or cybersecurity role, contributing to innovative solutions and secure systems.

TECHNICAL SKILLS

- **Programming Languages:** Python, Java (Basics), C (Basics)
- **Quantum Computing:** Qiskit, IBM Quantum (Runtime)
- **Cybersecurity Tools:** Nmap, Metasploit, Burp Suite, OWASP ZAP, Kali Linux
- **Web Technologies:** HTML, CSS, JavaScript (Basics), FastAPI, Streamlit
- **Databases:** MySQL
- **Operating Systems:** Windows, Linux
- **Version Control:** Git, GitHub

EXPERIENCE & PROJECTS

Hackathon Participant | Amaravati Quantum Valley Hackathon 2025 | Online/Virtual (assuming) | August 28, 2025

- **Project: Secure and Bias-Free Quantum Random Number Generator (QRNG) - "Bits to Qubits"**
  - Led "Hello World" team to develop a novel QRNG using **Quantum Superposition (Hadamard Gate)** for true randomness, addressing Problem Statement PS-1.
  - **Implemented Von Neumann debiasing** to ensure uniform randomness, effectively countering hardware biases.
  - **Engineered a FastAPI REST endpoint with Swagger UI** for real-time, secure access to random bits, enabling easy integration with external applications.
  - **Utilized IBM Quantum backend** (Qiskit IBM Runtime) for true quantum randomness, showcasing a unique advantage over pseudo-RNGs.
  - **Achieved a functional prototype** demonstrating feasibility on simulators and cloud-accessible real devices, with plans for scalability via batch generation.
  - **Tools:** Qiskit, Python, Streamlit, FastAPI, Uvicorn, NumPy, SciPy

Cybersecurity Intern | Symbiosys Technologies | May 2025 – June 2025

- **Project: Penetration Testing & Network Scanning**
  - Spearheaded penetration testing on Windows 7 & Metasploitable VMs using Kali Linux tools.
  - Executed UDP scans and leveraged over 15 Nmap NSE scripts for comprehensive service enumeration and vulnerability detection.
  - Successfully exploited SMB service (Port 445) using Metasploit, gaining Meterpreter shell access.
  - Configured RHOST, LHOST, LPORT parameters for efficient exploitation.
  - Developed detailed risk analysis reports, outlining end-to-end ethical hacking methodologies.
  - **Tools:** Kali Linux, Nmap, Metasploit, VirtualBox, NSE Scripts

Cybersecurity Intern | Adiroha Solutions (OPC) Pvt. Ltd. | July 2024 – September 2024

- **Project: Vulnerability Assessment & Penetration Testing (VAPT) of Web Applications**
  - Conducted security testing on login and forgot-password modules of a demo e-commerce site.
  - Identified critical OWASP Top 10 vulnerabilities, including SQL Injection, weak password policies, and user enumeration.
  - Reported significant forgot-password issues (missing token expiry, lack of CAPTCHA, input validation gaps).
  - Proposed practical mitigations such as MFA, rate-limiting, and secure token handling.
  - Documented findings meticulously per OWASP WSTG, assigning severity using CVSS v3.
  - **Tools:** Burp Suite, OWASP ZAP, Postman, Kali Linux, CVSS Calculator, OWASP WSTG

Facial Recognition Attendance Management System Portal | Diploma Final Year Project

- Designed and developed a comprehensive system for automated student attendance using face recognition.
- Implemented the backend using Python and managed the database with MySQL.
- Achieved automation of student attendance marking, significantly reducing manual effort and improving accuracy.

Industrial Training in Computer Engineering | Alwardas Polytechnic College (in association with AOG IT Solutions) | Dec 2022 – June 2023

- Gained practical exposure to hardware, C Language, and Python (Core & Advanced).
- Developed hands-on experience by contributing to real-time mini-projects.
- Enhanced proficiency in basic programming, system troubleshooting, and software usage.

EDUCATIONAL QUALIFICATIONS

Bachelor of Technology (B.Tech) in Computer Science and Engineering Gayatri Vidya Parishad College for Degree and PG Courses (Autonomous), Visakhapatnam *Expected Graduation: 2027 | Current Semester: 3-1*

Diploma in Computer Engineering (CME) Alwardas Polytechnic College, Visakhapatnam *Graduated: 2023*

Secondary School Certificate (S.S.C) Priyanka's Vidyodaya High School, Visakhapatnam *Graduated: 2020*

CERTIFICATIONS

- **Startup Business Management Program** – Ratan Tata Innovation Hub AP (August 20, 2025)
- **AI Tools & ChatGPT Workshop** – Be10x (August 3, 2025)
- **HTML for Absolute Beginners** – Traversy Media (Cursa) (July 27, 2025)
- **Introduction to Artificial Intelligence** – Simplilearn SkillUp–(July 21, 2025)
- **Artificial Intelligence** – Infosys Springboard (August 1,2025)
- **Python Programming** – AOG IT Solutions (June 13, 2023)
- **C Programming Language** – AOG IT Solutions (April 20, 2023)
- **MS Office** – AOG IT Solutions (February 25, 2023)
- **Workshop On Power Python** - LUDIFU (August 2022)

ACHIEVEMENTS

- **Science Olympiad Foundation (SOF):**
  - Awarded Zonal Excellence Certificate for outstanding performance in the SOF National Cyber Olympiad (Class 10).
  - Received Certificate of Distinction in the International General Knowledge Olympiad (IGKO).
  - Participation Certificates in multiple SOF Olympiads (Science, Mathematics, Cyber) (Classes 9-10).
- **Government of Andhra Pradesh:**
  - Received Certificate of Appreciation during Visakha Utsav-2018 for contributions to cultural/tourism initiatives.

INTERESTS

Cybersecurity & Ethical Hacking, Quantum Computing, Exploring New Technologies, Programming Challenges.