

Swapnil Dey

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Bachelor of Technology

Kalinga Institute of Industrial Technology

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🐙 GitHub Profile

🌐 LinkedIn Profile

EDUCATION

• All India Senior School Certificate Examination (10+2)

Aditya Birla Vani Bharati, Rishra

2021-23

Percentage: 78

• Bachelor of Technology in Information Technology

Kalinga Institute of Industrial Technology, Bhubaneswar

2023-27

CGPA: 8.52

PERSONAL PROJECTS

• Asistencia

A website-based facial authentication system, implemented using Python .

- Developed a facial recognition-based smart attendance system, automating in-time and out-time tracking for 100+ employees, reducing manual errors by 85%.
- Integrated role-based dashboards for admins and users, enabling real-time attendance visualization and generating customized reports, improving workforce management efficiency by 60%
- Technology Used: Python, Django, HTML, CSS, OpenCV ,Bootstrap

• SecureSight: AI-Powered URL Threat Detector

An AI-powered web application that detects and blocks malicious URLs in real time.

- Designed a fully responsive user interface, improving accessibility across multiple devices and streamlining cybersecurity threat monitoring for 500+ users.
- Built a cybersecurity tool to detect and classify malicious URLs using AI-driven threat analysis and YARA rule-based scanning, increasing threat detection accuracy by 92%
- Technology Used: HTML, CSS, Bootstrap

EXPERIENCE

• Virtual Project Internship collaboration with AICTE & Shell

December 2024 - January 2025

Edunet Foundation

Online

- Synthesized insights from Green Skills internship to recommend AI-driven strategies that improved energy grid efficiency by 15%, leading to actionable steps for reducing carbon footprint in grid infrastructure.
- Finished AI and Data Analytics virtual internship focusing on Green Skills via the Skills4Future Program, achieving perfect participation across all modules and earning certification in sustainable technology practices.

• Fortinet Virtual Internship

December 2024

AICTE-Eduskills

Online

- Developed Python script to automate vulnerability scanning of network infrastructure, reducing manual penetration testing time by 40 hours per week and improving the team's efficiency in identifying weaknesses.
- Presented findings on top 3 network vulnerabilities to senior leadership, with recommendations to fix the three biggest causes of system outages and data breaches, which improved system uptime.

RESEARCH PAPERS

- **“Post-Quantum Cryptography: Navigating Challenges and Shaping Secure Solutions”** Co-authored a study on quantum threats to RSA, ECC, and Diffie-Hellman, analyzing NIST-standardized PQC algorithms like CRYSTALS-Kyber & SPHINCS+, and highlighting the urgency of quantum-resistant cryptography amid IBM's 1,000-qubit roadmap .
- **“Threat Intelligence and Offensive Security: A Critical Challenge in Asia and Southeast Asia”** Co-authored research on cybersecurity threats and quantum cryptography, focusing on the rise in cyberattacks (42% increase in 2022) and the projected \$2 trillion cost of cybercrime by 2025.

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, SQL, HTML, CSS, Java

Frameworks: Scikit-learn, TensorFlow, Keras, Django, NodeJS

Tools: Git, PostgreSQL, MySQL, SQLite, Power BI, Google Cloud Console **Relevant Coursework:** Data Structures & Algorithms, Operating Systems, Object Oriented Programming, Database Management System, Software Engineering.

Areas of Interest: Web Design and Development, Cloud Security, Information Security .

Soft Skills: Technical presentation, Independent learning, Agile adaptability, Event leadership

ACHIEVEMENTS

- LeetcodeSolved 250+ questions (Max Rating: 1655)
- Pentathlon 2024 CTF Top 2% teams Nationwide
- IIT Kanpur CTF (June 2024) Ranked among Top 50 teams

CERTIFICATIONS

- Google Cloud Cybersecurity Expert
- Cisco Ethical Hacker
- The SecOps Group AppSec Practitioner (CAP)
- AI/ML for Geodata Analysis by ISRO