

# ABISHEK KUMAR

#### **PROFESSIONAL SUMMARY**

I am a computer applications with cyber security and cloud computing elective graduate seeking to apply my extensive academic background and practical experience in an organisation with an innovative vision. I am looking forward to contributing to a dynamic team and supporting research and development efforts.

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# **INTERNSHIPS**

**Project Trainee:** Developed a Django-based web application to manage SSM-data and generate visualisations based on user-specified date ranges. The application's security was enhanced using Django's built-in security features, and robust data management practices were implemented. This project also integrated with 3<sup>rd</sup> semester project in Chanakya University

**Web Development Intern:** As part of a 7-member team and lead, I worked on updating visitor statuses—Scheduled, Rescheduled, and Cancelled—along with managing appointment validity dates. Developed a responsive user interface using AdminLTE, jqGrid, and Bootstrap, and integrated the system with MSSQL.

Fidrox Technologies
Apr 2025 - Jul 2025

Oct 2024 - Feb 2025

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# **PROJECTS**

# **Networking Projects**

github.com/Abishek-Kumar-GHub

C, Arduino IDE, Python, Nmap

- Al and IoT Projects:
  - Vehicle Tracking management system with the help of GNSS and IoT sensors ESP32, Neo 6M GPS,
     OLED display and ThingSpeak for cloud network and analysis.
  - Created a wire-frame for Submersion Vehicle Detetcion and Alert with lot sensors Pressure Monitor,
     Moisture detector, NodeMCU, Neo 6M GPS and Al to detect without errors.
- **Python-Nmap End-Semester Project:** Developed a project using 20+ Python-nmap functions to automate network scanning and analysis.

#### **Development and Cyber Projects**

HTML, CSS, JavaScript, Django, Gemini API

- **Gemini Chatbot Application:** Designed a GraphQL-based chatbot to answer queries and summarize content using Flask framework; performed extensive API security analysis to prevent information disclosure.
- **Vulnerable Application Labs:** Created two applications for SQL injection (Django) and Cross-Site Scripting (Flask). Offered solutions to mitigate vulnerabilities.
- **Ransome-Flask:** It is a Flask-based simulation project that demonstrates the core mechanics of ransomware attacks for educational purposes. It showcases how files can be encrypted and decrypted using symmetric key cryptography within a controlled environment.

#### **Machine Learning and Predictions**

Python, TensorFlow, Scikit Learn, Weka, Java

- **TensorFlow Image Prediction:** A curated collection of TensorFlow code snippets demonstrating key deep learning functions, including image prediction tasks with comparisons of actual vs. predicted outputs.
- **COVID Prediction:** Developed a machine learning model in Java using Weka to predict COVID-19 case trends from real-world datasets, focusing on classification and trend analysis.

#### **Cloud Security Projects**

AWS CLI, Docker

- IAM Role and Custom Policies: Designed an AWS IAM role with restricted user access. Configured custom policies to:
  - Deny deletion of contents in S3 buckets.
  - Allow read-only access to S3 and EC2 instances.
  - Enable specific start/stop permissions for EC2 instances.
- **Docker Environment Management:** Worked with Docker containers and environments to optimize application deployment.

# **TECHNICAL SKILLS**

**Programming Languages:** Python, C, C#, PHP, Java, HTML, CSS, JavaScript, C+, Visual Basics, Angular, React **Tools & Frameworks:** Angular, Django, Flask, .Net Core 8, Entity, Burp Suite, Nmap, Wireshark, MongoDb, MSSQL, OracleSQL, Postgresql, MySQL

Cloud Platforms: AWS (S3, EC2, IAM, Lambda), Docker, Kubernetes

**Cybersecurity Expertise:** Vulnerability analysis, API security, SQL injection, XSS, Hash functions, JWT, Encryption

and Decryption algorithms

# RESEARCH EXPERIENCE

#### Research on Database Forensic Investigation | 2023-2024

Department of Chanakya University

- Collaborated with a research team to explore database forensic investigation methodologies.
- Conducted experiments on Oracle databases and gained practical insights into real-world forensic scenarios.
- Delivered a seminar on findings and shared knowledge with peers and faculty.

### Research on Cyber Security | 2023-2024

Department of Chanakya University

- Analyzed vulnerabilities in the Cosmos Bank attack and presented causes and mitigation strategies.
- Posted research work about following on medium (medium.com/@abishektechy)
  - OWASP top 10: A summary of the ten most critical web application security risks, aimed at raising developer awareness
  - **Cookie Headers:** An exploration of HTTP cookie header fields—how they work and best practices for secure session implementation.
  - **How to capture mobile traffic:** A guide on intercepting and analyzing mobile app network requests using tools like Burp Suite
  - **ADB shell:** A walkthrough of using Android Debug Bridge shell commands to access and control Android devices for debugging and development.

## Research on Cloud Security | 2023-2024

Department of Chanakya University

• **Flaws.Cloud:** Explored vulnerabilities in cloud security and devised mitigation techniques using AWS CLI commands.

#### **EDUCATION**

#### Master of Computer Applications in Cyber Security and Cloud Computing

Chanakya University

Nov 2023 - Jul 2025

- Relevant Coursework: Full Stack Development with Angular Framework, Data Structures with C, Python Advanced, Bash Scripting, Java with OOP, Burp Suite, Nmap, Wireshark, AWS, Postman, DBMS.
- CGPA: 9.3

#### **Bachelor of Computer Applications**

Scott Christian Collage

- Relevant Coursework: HTML, CSS, Java Script, PHP, SQL, C, C++, Visual Basics, Python for beginners, Shell Scripting
- CGPA: 8.7

# **TOOLS EXPLORED**

**Networks:** Encryption and Decryption: Implemented algorithms such as Substitution Ciphers, RSA, AES, Triple AES, Feistel Cipher, DHKE, DES, and Hash Functions.

**Cyber Security:** Hands-on experience with Base64 encoding/decoding, JWT, Wappalyzer, Android app testing (MobSF), Selenium automation, Shodan, BWAPP, Metasploit, SQLmap, and PortSwigger Labs.

Cloud Security: AWS Cloud Service, MFA, S3 Buckets and policies.

**Tensorflow:** Explored Tensorflow python module's 15+ major functions and dependencies.

**Github Webhook:** Developed a minor project using the GitHub Webhook method to capture push, pull, and merge events, and dynamically display the updates on an action.html page.

#### **SOFT SKILLS**

• Good communication • Adaptability • Problem solving • Team coordination • Quick Learner