Pratham Chauhan

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EDUCATION

Thapar Institute of Engineering and Technology   Patiala, Punjab
B.E Computer Science and Engineering | Current **CGPA: 7.15 /10**   2022-2026
Govt. Model Senior Secondary School   Patiala, Punjab
Science (PCM) | 12th **Percentage: 88%**   2022
Sunflower Model High School   Patiala, Punjab
High School | 10th **Percentage: 95%**   2020

WORK EXPERIENCE

Blockchain Intern – ELC Summer Internship, TIET   Jun'25–Jul'25
- Explored blockchain-based approaches to log integrity by developing a secure logging prototype on the Solana network over a 6-week internship.
- Implemented Merkle tree batching to process and verify over 500+ Windows Event Logs, gaining practical understanding of hierarchical hashing for tamper detection.
- Developed a Streamlit-based interface enabling real-time verification of Merkle roots, displaying results in under 5 seconds per batch.
- Created a detailed README.md with setup instructions, usage workflow, and troubleshooting guidelines, published on GitHub: github.com/chauhan-pratham/solana-secure-logging-prototype

Cybersecurity Summer Trainee – Acmegrade   Aug'23–Oct'23
- Executed a team-assigned security project to attempt HSTS Hijacking as part of a simulated MITM attack, validating modern browser defenses against HTTPS downgrades
- Configured Bettercap modules (arp.sniff, hstshijack) for traffic interception and HTTPS stripping, confirming that HSTS policies blocked downgrade attempts.
- Automated network sniffing and redirection via custom caplets, streamlining repeat test execution by 50%.
- Documented the attack process, findings, and security implications in a technical report, strengthening internal awareness of HSTS's role in web security.

PROJECT

SMS Spam Classifier | Python, Scikit-learn, Streamlit, NLTK   Aug'24–Nov'24
- Developed a natural language processing (NLP) pipeline using TF-IDF vectorization and logistic regression, achieving approximately 95% classification accuracy on benchmark spam datasets.
- Deployed the model with a Streamlit web interface featuring interactive filtering and real-time text classification preview.
- Implemented preprocessing steps including tokenization, stopword removal, and stemming using NLTK to enhance feature quality.
- GitHub: https://github.com/chauhan-pratham/SMS_Spam_Classifier

ChatMinds – Flask-based Chatbot | Python, Flask, HTML, CSS, JSON   June'24–May'24
- Developed a chatbot application in Flask to handle user intents using a JSON-based dialogue management system.
- Designed and implemented an interactive web interface with HTML and CSS for smooth user interaction and deployment.
- Integrated structured intent-response mapping to ensure consistent and predictable chatbot behavior.
- GitHub: https://github.com/chauhan-pratham/Chat-Minds

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Organizer & Anchor – Alumni Meet, Sunflower Model High School   Nov'23–Dec'23
- **Led and co-hosted** an alumni meet with a 4-member team, managing event logistics and planning activities.
- Engaged **100+ attendees** from multiple graduating batches through stage coordination and audience interaction.

Volunteer – Pratigya Abhiyan   Oct'22–Present
- Served as Class In-charge for Class 7, managing a team of 30 volunteers.
- Conducted educational activities for 70+ underprivileged children.
- Organized events like Children's Day, Society Fair, and various competitions and games.

TECHNICAL SKILLS

Programming Languages: C, C++ (Object-Oriented Programming), SQL
Core CS Subjects: Operating Systems, DBMS, Computer Networks, Ethical Hacking

ACHIEVEMENTS

- Raised CGPA from 4.77 to 7.15 through consistent effort while balancing academics and physical fitness, demonstrating discipline and strong time management skills.
- Bronze medalist in district-level Karate tournament, showcasing commitment and competitive spirit as a Taekwondo practitioner.
- Actively participated in school plays and competitions, developing teamwork, public speaking, and leadership abilities.

CERTIFICATIONS

- AWS Academy Cloud Security Foundations   ([Link](#))
  Topics: IAM, Secure Networking, Shared Responsibility, CloudTrail
- AWS Academy Cloud Security Builder   ([Link](#))
  Topics: Encryption, KMS, AWS CloudWatch, Security Automation