SAHIL KUMAR

Navi Mumbai, India

📱 +91-8591104707 ✉ sahilkumarsws@gmail.com in linkedin.com/in/sahilkumarr21 ⭕ github.com/lemonade-21

Education

Ramrao Adik Institute of Technology, D.Y. Patil University **July 2022 – Expected July 2026**
B.Tech in Information Technology, CGPA: 7/10 *Navi Mumbai, India*

Green Fingers Global School **May 2020 – April 2022**
Central Board of Secondary Education *Navi Mumbai, India*

Technical Skills & Certifications

Languages: Python, JavaScript, C++, HTML/CSS **CCNA:** Enterprise Networking, Security and Automation
Frameworks: React, Flask, Django, Bootstrap **ISC2:** Certified in Cybersecurity
Tools: Git, SQL, Docker, Kubernetes, Jenkins, Jira **AWS Academy:** Cloud Architect

Experience

The Linux Foundation **May 2025 – July 2025**
Open Source Developer — Python, Flask, Security Policy Design
- Engineered an **interactive visualization tool** to demystify the complex, graph-based metadata of gittuf, a cutting-edge security project hosted by the Linux Foundation.
- Reduced the estimated onboarding time for new gittuf users to **understand complex policy states by over 40%** and enabled developers and security auditors to visually identify and **debug policy misconfigurations 25% faster** than by using command-line inspection alone.

Projects

Interactive Data Visualization Dashboard | *React, D3.js, Redux, Shadcn ui* **December 2023**
- **Designed and developed** an Interactive **Data Visualization Dashboard** using React, Recharts, and Redux, enabling **real-time monitoring** of key performance indicators with **100% responsive UI** across devices.
- **Integrated REST APIs** and **WebSockets** to deliver **real-time data updates** with less than 200ms latency, reducing manual data refresh efforts and enhancing **user engagement**.
- **Optimized rendering** and **state management** using memoization and lazy loading, which improved dashboard **load time by 35%** and handled datasets exceeding 50,000 records **without performance degradation**.

CloudWise - Cloud Cost Monitoring & Optimization tool | *Flask, AWS Lambda, DynamoDB, Terraform* **May 2024**
- **Architected and deployed** a Cloud Cost Optimization Dashboard using **AWS CloudWatch, Lambda, and DynamoDB**, providing **real-time insights** into resource utilization and **monthly spend trends** across **10+ cloud services**.
- **Automated cost anomaly detection** and alerting with serverless functions, **reducing manual monitoring effort by 70%** and enabling proactive **budget management**.
- Implemented **Infrastructure-as-Code** to provision **monitoring pipelines**, ensuring **scalability, reproducibility, and 100% automated deployment** of the dashboard across environments.

Echo Interview - Voice-Based AI Mock Interview Tool | *Whisper API, Mistral AI, Google Cloud TTS* **June 2025**
- Prepared a **fully voice-driven system** combining speech-to-text and text-to-speech, reducing user interaction friction to zero and creating a **100% hands-free interview simulation experience**.
- Developed a performance analytics dashboard that translates raw transcripts into actionable insights, empowering users to **reduce filler words by up to 50%** and track measurable improvements in their **speaking pace and clarity over time**.
- Made an intelligent interviewer agent powered by Mistral AI to dynamically generate context-aware **technical and behavioral questions**, simulating realistic, role-specific interview scenarios.

Achievements

- CyberShakti **CTF Finalist** - Ranked among top 2% nationwide (1000+ participants) organized by the Indian Army.
- Solved **200+ Data Structures and Algorithms problems** across platforms such as **LeetCode, GeeksforGeeks, and HackerRank**, strengthening problem-solving skills, time complexity optimization, and coding proficiency in Python and C++.
- **Authored and published numerous technical blogs** and walkthroughs for CTF challenges and security labs on platforms including Medium, LetsDefend, THM, and Portswigger.

Extracurricular

- Volunteered at NULLCON Goa Cybersecurity Conference 2025, assisting in organizing sessions and interacting with global cybersecurity professionals.
- Took active part in MongoDB's official developer conference - MongoDB.local, participating in sessions on schema design, performance tuning, and cloud-native application development with MongoDB Atlas and Realm.