

ABHAY TRIPATHI

[in @abhaytri](#) | [@abhaytri](#) | [abhaytri.github.io](#) | [✉ abhay-tripathi@live.com](#) | [☎ +91 8800958568](#)

Skills

- ❖ Java | Python | C# | C | JavaScript | TypeScript | Node.js | React | Express | PHP | Linux | Apache | NGINX | MySQL | MongoDB
- ❖ HTML | CSS | Bootstrap | jQuery | Flask | FastAPI | MariaDB | TCP-IP | Web Sockets | REST APIs | CGI | CDN | TensorFlow | OpenCV | PyTorch
- ❖ Android Development (Java SDK) | Unity | Oculus SDK (VR) | Java Swing | TKinter | PyGame | AWS EC2 | Firebase | MVC | Design Patterns | Git
- ❖ Full-Stack Development | Android Development | VR Development | SQL | NoSQL | Cloud Hosting | Cryptography | TCP Networks | SQLite

Experience

IT Infrastructure Lead
and Software Engineer

Youth4Nation Foundation

May 2023 – Jul 2023
Delhi (India)

- ❖ Created an online presence of the Organization by designing and implementing the Organization's Tech Stack (E-Mail Hosting, Web Hosting, Payment System, etc.) and developing the [Organization's Website](#), and optimized it for SEO.
- ❖ Designed and developed a **Member Enrolment System Software with ID Card Facility** which is being used to enrol **1000+ existing Members and all future Members**. Developed an **Online Payment System** using existing solutions.
- ❖ Developed a **Member E-Mail OTP Based Authentication and SHA-256 and Salting based Session System**. Designed and developed a **Secure Authorization based CDN to store digital photos of the Members of the Organization securely**.
- ❖ Designed a **Stateless Reference Code Generation Algorithm** and developed a System to use the same using which Reference Codes can be generated for letters issued by the Organization, which can later **verify authenticity of the issued letter**, hence **providing credibility for the letters issued by the Organization**.
- ❖ **Technologies Used:** LAMP (Linux, Apache, MySQL and PHP) Stack, HTML, CSS, Vanilla JavaScript, Bootstrap, jQuery. Developed an **Automatic Mailing System** for sending professional emails using Python.

Full Stack
Web Developer

Manipal University Jaipur

Jan 2023 – Mar 2023
Jaipur (India)

- ❖ Worked on the **development of the HR-Employee Appraisal Web Portal** which is being used to conduct the **appraisal process of 500+ employees and professors**. Made the Web Portal **highly secure** by **patching critical security loop holes**.
- ❖ **Re-Organized the Tech Stack** to make the Web Portal **highly fast and more efficient**.
- ❖ **Technologies Used:** HTML, CSS, React.js, Python (Uvicorn Web Server), REST APIs (developed using FastAPI), MongoDB.

Projects

- ❖ **FaceTrack:** AI Based Facial Attendance Web App used to mark attendance based on facial data of the students. [Link to project](#). (OpenCV, Python, Web Sockets, HTML, CSS, JS, Bootstrap, OpenCV.js). [Jan 2023]
- ❖ **TeleOperation:** VR App which is made to demonstrate the Proof of Concept of TeleOperation which was ideated by [@akshetpate](#). TeleOperation is the ability to **control mechanical devices virtually** using remote technologies. [Link to demo video](#). (Unity Game Engine, Oculus SDK (C#), TCP Connections). [May 2022 – Jun 2022]
- ❖ **DigiFriend:** App which makes your phone like a smart device. Simply keep talking without pressing any buttons. [Link to download app](#). (Android SDK, TTS Service, AWS EC2, NGINX, Flask, MySQL). [Feb 2021 – Mar 2021]
- ❖ **QueueScan:** App for starting virtual queues with any QR code, completely anonymously with no registration/KYC. Link: [queuescan.com](#). (Android SDK, HTML, CSS, JS for PWA, Firebase). [May 2020 – Jun 2020]

Education

Third Year Student, Bachelor of Technology in Computer Science and Engineering (CSE),
Manipal University Jaipur, Rajasthan, India - 2021 to 2025. CGPA (Grade) till 2nd Year (4th Semester): 7.69 / 10.

Certifications, Achievements and Other Details

- ❖ [Goldman Sachs Virtual Engineering Program](#) | [Object Oriented Programming in Java \(by UC San Diego\)](#) | [Data Structures \(by UC San Diego\)](#).
- ❖ **HackerRank:** 5★ 30 Days of Code Badge, 4★ Problem Solving Badge, 3★ Java. Developed multiple modules in C, Python, Java and JavaScript for various utilities and functionalities ([GitHub Link](#), [PyPi Link](#), [Portfolio Website Link](#), [HackerRank Link](#)).
- ❖ Developed [MultiCrypt Algorithm](#) for Secure Hybrid Encryption (Modified RSA + Own algorithm for Symmetric Encryption).
- ❖ Developed a small level **Custom Protocol** on TCP. Developed **Server** for the same in C and **Client** for the same in Java.