

Tarush Gupta

+91-9888104142
tarush23.gupta@gmail.com

TarushGupta23
in tarush23-gupta

Technical Skills

- **Programming Languages:** Java, Python, JavaScript, C, C++, Arduino
- **Web Technologies:** React.js, Express.js, HTML, CSS
- **Database:** PostgreSQL, MySQL, MongoDB, Firebase, PHP
- **Tools & Software:** Git, VS Code, Android Studio
- **Concepts:** Data Structures, Algorithms, OOP, RESTful APIs

Education

Dr. B. R. Ambedkar NIT Jalandhar

B.Tech in Information Technology

GPA: 7.76

2022-2026

Police DAV Public School

95%

XII (CBSE)

2021-2022

Police DAV Public School

91.33%

X (CBSE)

2019-2020

Work Experience

Library Management System (*Open Source Project*)

- Implemented I-card scanning using react-barcode-reader to streamline roll number recognition, improving student entry efficiency by 20%.
- Integrated with the Koha library management system using Express and MySQL, managing over 7,000 user records efficiently.
- Enhanced security by deploying JWT authentication with jsonwebtoken and securing passwords using crypto-js for robust data protection.
- Added an administrative dashboard to monitor library activity and generate reports in pdf and excel format.

SwaYaan (*Capacity Building for Human Resource Development in Unmanned Aircraft Systems*)

- Secured a grant of 2.5 lakhs from the Ministry of Electronics and Information Technology.
- Engineered a UAV system with ArduPilot for precision terrain modeling, structural analysis, and crop health assessments.
- Achieved a 95% reduction in surveying time and a 90% decrease in crop failure through UAV technology.

Google Developer Student Clubs (*Android Development Team Member*)

- Conducted a live YouTube session with 230 viewers, demonstrating the development of an attendance management app using Kotlin and Firebase.
- Secured sponsorship from ICP HUB, increasing Hackmol's visibility and support.

Projects

Atlas Game

- Developed a scalable Atlas Game with Node.js and socket.io, supporting 300+ rooms and 100+ players per room.
- Designed a robust API using Express.js and PostgreSQL for managing and validating 5,000+ location data entries.
- API contains 11 endpoints such as listing all cities in a state, allowing integration with other applications beyond the game.
- Deployed on Vercel, ensuring reliable uptime and real-time synchronization for the game and API.

HealthSync

- Engineered an AI search engine with TensorFlow, processing over 10,000 daily searches for healthcare services.
- Developed a real-time notification system with Firebase Cloud Messaging, sending 1,000+ notifications daily to update patients and pharmacies.
- Innovated an OPD queuing system that cut city-wide wait times by 30% through real-time patient flow management.
- Expanded HealthSync into a cross-platform application, compatible with Mac, Windows, and Android devices.

Achievements

- Led GDSC HackMol 5.0, overseeing 50+ teams and ensuring successful event execution.
- Achieved All India Rank 13,543 in JEE Mains 2022, ranking in the top percentile of test-takers.
- Ranked 21st in NIT Jalandhar's academic batch, demonstrating consistent academic excellence.