# ARYA VEER SINGH CHAUHAN

| +91 8619151680 | aryaveersingh2003@gmail.com | LinkedIn | GitHub | Portfolio

## Education

**Birla Institute of Technology and Science, Pilani** — Pilani, India
*B.E. Computer Science Engineering;* ***GPA: 8.64/10*** — *2020 – 2024*

## Skills

**Languages:** Python, Java, C/C++, HTML/CSS, JavaScript, SQL, NASM
**Technologies:** Django, Django Rest framework, React.js, Redux, Next.js, Tailwind, Bootstrap, MySQL, PostgreSQL, Sanic, Tortoise, Spring Boot, Postman, Compiler construction, Server Configuration, Socket Programming, Git, Asyncio, SVN, Docker, AWS, Kubernetes, GCP, SQS/Kafka, RabbitMQ, MongoDB, JWT, OAuth 2.0,
**Methodologies:** Agile, Scrum, OOP, Functional Programming, Microservices, API Testing automation, Design Patterns

## Experience

**Tata 1MG** — Gurugram, India
*Software Developer Engineer- I* — *July 2024– Present, Full-time*

- Eliminated third-party dependency by developing a rule engine to support business rules potentially **saving Rs. 10,00,000** per year.
- Integrated E-consultation flow with B2B segment, **creating a new product** - MER, having projected revenue of Rs. 60 Lac p.a.
- Optimised a graph-based algorithm from O($n^2$) to O($n$), reducing PDF generation time by 60%

**BITS Pilani Library** — Pilani, India
*Software Developer* — *August 2023– May 2024, Part-time*

- Digitalised the heritage gallery of BITS having 1000+ media files developing heritage website using **React.js** and **MongoDB**.
- Designed and Programmed the library website of BITS utilising **Next.js** for server-side rendering and caching to minimize API hits by 70%. Leveraged **Django** and its **ORM** for streamlined fast paced development.
- Conceptualized a framework using to upload data **asynchronously** reducing API latency by 85%

**Standard Chartered GBS** — Bengaluru, India
*SDE Intern* — *May, 2023 – July, 2023*

- Engineered a proof-of-concept software with **React.js** and **Spring Boot**, reducing manual work by 4 hours in account opening.
- Streamlined API testing with Postman, automated using Newman and Python subprocesses, reducing QA effort by 2 hours.

## Projects

**MeDiKIT** — January 2024 - May 2024

- Conceptualized a framework to collect Electronic Health Records for medical research datasets as a part of **Rs. 5 Cr funded** project.
- Deployed a web-application for data collection developed using **Django**, **React.js** and **PostgreSQL** having SUS score of 72.9
- Pushed collected data after achieving 90% psuedo-anonymization using **Java** based ETL tool to populate dataset on **cloud**.

**Studydeck** — July 2023 - October 2024

- Engineered the backend using **Django** for a platform-independent software used by more than 80% BITS students for academics.
- Devised a **BFS** and **multithreading** based algorithm to parse google drive and store 800 GB of study resources in **S3 bucket**.
- Consolidated a **CDN** on campus LAN to decrease approx. **70% cost** and also provided a resource-sharing feature to students.

**ERPLAG Compiler** — Feb 2023 - May 2023

- Architected a custom compiler with 30 keywords, 120 grammar rules in **C** using simple data structures.
- Implemented the backend of compiler with Abstract Syntax Tree reducing memory efficiency by 70% for semantic analysis.
- Established a three-address code to generate **NASM** code for 12 semantic runtime checks and further execution of code.

**Project Onetap** — September 2021 - March 2022

- Formulated an expense system, allowing 8000+ users to order food, book cabs and shows, order merchandise on a single tap.
- Handled over **1000 requests per second** by following best practices for backend and databases like caching and indexing.
- Architected a **authentication** system based on **JWT** with an encrypted QR-based wallet facilitating transactions over Rs. 10 cr. p.a.

## Coursework

C Programming, **Object-oriented programming(Class topper)**, Database Systems, Data Structures and Algorithms, Operating Systems, Computer Architecture, Human Computer Interaction(HCI) design, Computer Networks, Compiler Construction, Artificial Intelligence, Design and Analysis of Algorithms