

# Sidharth Mukherjee

+91 9599192853 | [siddharth16529@gmail.com](mailto:siddharth16529@gmail.com) | [linkedin.com/in/Sidharth](https://www.linkedin.com/in/Sidharth) | <https://github.com/Sidd00P>

## EDUCATION

### VIT Bhopal University

Bachelor of Technology in Computer Science — 8.4 CGPA

Bhopal, MP

September 2023 – September 2027

### Vishwa Bharti Public School

Senior Secondary — Score: 90%

Noida, UP

April 2022 – April 2023

### Vishwa Bharti Public School

Secondary — Score: 80%

Noida, UP

April 2009 – April 2021

## ABOUT ME

Passionate Computer Science student with a strong interest in Java development, cloud technologies, and Art. Skilled in building secure and scalable full-stack applications, containerization workflows, and technical document design. Continuously learning new technologies and refining my craft to align creativity with engineering principles.

## PROJECTS

### Only AI Arts | *Spring Boot, Vue.js, PostgreSQL, Docker*

April 2025 – Present

- Created a **full-stack web application** comparing generative art with human art to create real-time rankings of AI models and art software
- Developed the backend using Spring Boot with Java, Spring Security, Hibernate, and Cloudflare bucket storage and implemented Google OAuth
- Normalized SQL schemas** to reduce query complexity and improve performance; wrote a **PostgreSQL vector query** to implement a search system
- Implemented a **CI/CD pipeline** using GitHub Actions to compile and test the application, build a **Docker image** and deploy it to an Azure VM
- Used minimal Azure services and Cloudflare R2 to reduce running costs to under **\$1 per 24 hours**, while handling over **2,000 requests per day** and maintaining **100+ active users**

### My Braille | *Android, Java, Gradle, Material 3*

February 2025 – April 2025

- Created an Android application to allow the visually impaired to learn Braille by generating vibrations using device haptics for all **Braille characters from A–Z and 0–9**
- Designed an accessible UI following **Material 3** principles, incorporating audio cues to enhance user-friendliness
- Made it lightweight and efficient by using only Java/XML for logic and layout

### Train Traffic Simulator | *Java, Maven, Swing*

October 2024 – April 2025

- Engineered a **modular simulation tool** for managing custom rail traffic, similar to what is used by **station masters**
- Developed a realistic **automatic signaling system with switch interlocking** and a scheduling system providing a realistic experience
- Developed a **multi-threaded Java Swing application** that allowed for the creation of any rail traffic pattern and station design, with a custom XML parser
- Built and simulated complex maps of real stations with **32 tracks and more than 50 trains over a 2-hour runtime**
- Created an installer and executable using **JPackage** and distributed it on SourceForge

## TECHNICAL SKILLS

**Languages:** C, Java, Kotlin, SQL (Postgres), JavaScript, Python

**Frameworks:** Spring Boot, Vue.js, Jetpack Compose, Material-UI, Flask

**Developer Tools:** Maven, Gradle, JPackage, Docker, IntelliJ, Android Studio, Eclipse, VS Code

**Libraries:** AWS R2 SDK, Google APIs SDK, JavaFX, Swing