Madhav Agrawal

"**System Engineer at TCS** with expertise in **Spring Boot, Microservices** . Experienced in building **scalable RESTful APIs, business automation (IBM BAMOE), and PostgreSQL database management** . Passionate about designing efficient backend solutions and improving system performance."

✉ ma9456880432@gmail.com

📱 9456880432

🔲 leetcode.com/u/magrawal_be19/

in linkedin.com/in/madhav-agrawal-7735a8192?

⦿ github.com/ma9456880432

EDUCATION

B.E. Computer Science and Business System
Thapar Institute Of Engineering And Technology

2019 - 2023   *Patiala, Punjab*

CGPA
- 7.50

CBSE (XII)
Ramanlal Showawala Public School

2018 - 2019   *Mathura, UP*
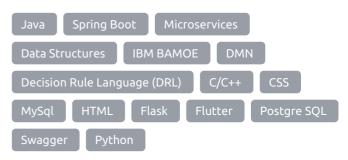
Percent
- 88%

PROFESSIONAL EXPERIENCE

TATA CONSULTANCY SERVICES(TCS)
System Engineer (Backend Developer)

2023 - Present
Project : Government e Marketplace (GeM) | Feb 2023 - Present
DESCRIPTION
- **"Domain: E-commerce Role"**
- **Backend Developer Project Frameworks & Languages : Spring Boot , IBM Business Automation Manager Open Editions (BAMOE) , Keycloak, JPADatabase: PostgreSQL**
- **Tools: Eclipse IDE, Keycloak, Postman ,Swagger**
- **Enhanced API response time by 30%** by optimizing **RestTemplate exchange** for improved data retrieval.
- **Reduced manual job reassignment effort by 40%** by developing **job reassignment endpoints** and integrating IBM BAMOE API for task automation.
- **Automated 60% of business rule processing** using **BAMOE's Decision Rule Language (DRL)** and **Decision Model and Notation (DMN)** in IBM BAMOE , enhancing decision-making efficiency.
- **Increased API documentation clarity by 50%** by using Swagger , ensuring seamless integration across teams.
- **Improved process efficiency by 25%** by creating a structured **process instance retrieval API** using Spring Data JPA and PostgreSQL .
- **Responsibilities:Proactive Developer engaged in development of web services and enhancements for the Project.Finalizing an approach to implement the requirement by exploring various team meetings.**

SKILLS

Java   Spring Boot   Microservices   Data Structures   IBM BAMOE   DMN   Decision Rule Language (DRL)   C/C++   CSS   MySql   HTML   Flask   Flutter   Postgre SQL   Swagger   Python

PERSONAL PROJECTS

Organ donation and procurement system(2021) ↗
- **Increased efficiency by 40%** through a **CRUD-based organ donor and recipient system** .
- **Improved page loading time by 35%** using **server-side rendering architecture** .
- **Enhanced security by implementing session-based authentication** , reducing unauthorized access by 50%
- **Tech Stack:** Python, MySQL, Flask, HTML, CSS, Bootstrap

Personal expenses app(2022) ↗
- **Tracked 100% of user expenses weekly** , helping users monitor spending habits.
- **Improved financial awareness by 30%** through **dynamic charts** displaying daily spending trends.
- **Tech Stack:** Flutter, Dart

CERTIFICATES

CProgramming Certification(2019) , Java Programming(2021) - Udemy , Spring Framework(2022)

ACHIEVEMENTS

Secured 3rd position in Business Elevate event organized by EDC. Participated in Inter Hostel Cricket competition in my first year.

LANGUAGES

English
Full Professional Proficiency

Hindi
Full Professional Proficiency

INTERESTS

Stocks   Cricket   Coding