

# Omkar Hadawale

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## EDUCATION:

- **MS, Computer Science - New Jersey Institute of Technology, Newark, NJ (GPA 3.5)** *Sept'22 – Dec'23*  
Relevant Courses: - Data Structures & Algorithms, Operating Systems, Internet & Higher Layer Protocols
- **BE, Electronics and Telecommunications Engineering - Pune University, Pune, India** *Aug'17 – May'21*

## PROFESSIONAL EXPERIENCE:

**Analyst (Full Stack .NET Developer)** *Aug'21 – Aug'22*

**Capgemini Technology Services, Gandhinagar, India**

- Developed features in **Agile SDLC (Jira, CI/CD)** understanding individual user stories and acceptance criteria. Used **JFrog** Artifactory for package sourcing and publishing, **Git & GitHub** for version control.
- Designed a microservices architecture base application for managing Medical IoT devices using **ASP.NET (MVC), Angular, Entity framework, DOTNET Core in C#**. 30% improvement in system performance and 20% reduction in response times.
- Implemented key microservice endpoints (**RESTful Services-API**), including data Import-Export, User Tenancy, Security service and Auditing service(**SQL, POSTGRESQL, RabbitMQ**). Achieved 25% enhancement in real-time data transactions.
- Deployed microservices on **Docker** containers enhancing scalability by 15%. Written Unit, Component, and Interface automated test cases, TSQL for database testing. Dependency Injection and Design patterns (Abstract factory, Singleton).
- Secured 2nd rank in L1 exams for DOTNet Core with **Azure** conducted by Capgemini L&D.

## TECHNICAL SKILLS:

**Languages:** - C#, Python, Java, C, Scala, JavaScript

**Database:** - MSSQL, PostgreSQL, MySQL, PL/SQL

**Framework:** - DOTNET Core, ASP.NET, Flask, Angular, Bootstrap

**Deployment:** - Docker

**Cloud Platform:** - Azure.

**Other:** - Linux, Windows, HTML/CSS, Agile, JIRA

## PROJECTS:

**Linux Terminal:** *Jan'23 – May'23*

- Written C++ program to execute Linux commands, adding features on top of Linux Terminal.

**Bank Website ([GitHub](#)):**

*Sept'22 – Dec'22*

- Architected a Flask application in Python, utilizing MySQL database for robust data storage; deployed and maintained the application on the Heroku hosting platform to ensure high availability and optimal performance.
- New User registration, edit (Username, email & password), Login/Logout, Bank Account creation, Money (Deposit, Withdraw, Transfer self & other).

**Library management system ([GitHub](#)):**

*Sept'22 – Dec'22*

- Derived EER diagram from requirements. Creation of associated data model documentation such as entity and attribute definitions and formats.
- Mapped EER diagram to relational schema. Analyzed and designed complex data models, logical databases and relational database definitions.
- Constructed a robust user-friendly interface using Python and the Flask framework, while designing and populating necessary tables in MSSQL.
- Integrated critical functions such as document reservation, borrow, return, fine calculation, adding new documents, and branch view.

## Machine Learning Projects:

**Emotion Linked AIoT Based Cognitive Home Automation System with Sensovisual method:** *Aug'20- May'21*

- Developed and implemented a Cognitive home automation system leveraging Haar Cascades for face recognition, CNN for emotion classification, motion sensors for human detection, machine learning; achieved a 30% reduction in energy consumption.
- Led the development of a Raspberry Pi-driven project, utilizing Python and sensors (temperature, humidity, motion, light intensity) to optimize energy consumption, improved usability, and enhanced user experience.
- Streamlined the user interface for controlling appliances hosted on Apache server by leveraging Python and PHP; optimized user experience resulting in a 50% reduction in user errors and a 25% increase in overall user engagement.

**Minor Machine Learning projects:** Applied prediction & classification ML algorithms on standard data sets with (Linear Regression, Logistic regression, Decision Tree, Random Forest, KNN, SVM, Deep Learning, Neural Networks, LSTM, NLP).

## PUBLICATIONS:

Paper Title: - "[Emotion Linked AIoT Based Cognitive Home Automation System with Sensovisual method](#)" (Best Paper Award) *Jan'22*