

# SHYAM MAKWANA

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## EDUCATION

### Indiana University

Master of Science in Computer Science | GPA: 4/4

Bloomington, Indiana

August 2022 – May 2024

**Relevant Coursework:** Applied Algorithms, Software Engineering, Elements of Artificial Intelligence, Machine Learning.

### Dharmsinh Desai University

Bachelor of Technology in Information Technology | GPA: 9.32/10 with Gold Medal

Gujarat, India

July 2018 - May 2022

**Relevant Coursework:** Object-Oriented Prog, Design Patterns, Operating Systems, Distributed Computing, Computer Networks.

## TECHNICAL SKILLS

**Languages:** Python, Java, C++, C, SQL, C#, R, JavaScript, HTML, CSS.  
**Web Technologies:** ReactJS, NodeJS, Django, AngularJS, jQuery, Bootstrap, Spring Boot, .Net, Hibernate.  
**Databases:** MySQL, MongoDB, PostgreSQL, Neo4j, Oracle SQL.  
**Tools:** Git, Visual Studio, Postman, Anaconda, Jupyter, Eclipse, Wireshark, Netbeans.  
**Other Technologies:** Jira, Docker, Jenkins, Kubernetes, Azure, AWS, GitHub Actions, Shell script, Linux, Windows, Cloud.

## EXPERIENCE

### Indiana University

Teaching Assistant - System Prog with C & Unix (C291) and Data Structures (A594)

Bloomington, Indiana

August 2022 – Present

- Mentoring a class of 200+ students, aiding professors during classes, conducting labs, reviewing weekly assignment submissions, and providing individual feedback to students during office hours.

### Indian Space Research Organisation (ISRO)

Software Research and Development Intern | C#, .Net, C++, Socket Programming

Gujarat, India

December 2021 – March 2022

- Developed an authentication protocol using Single Packet Authorization, used by 78 internal teams, that grants access to the user to access specific private services in the network.
- Improved the current network architecture to Software Defined Perimeter model using socket programming and C#, increasing its processing speed by 34% after adding 7 new features, utilizing a single network packet.
- Increased privacy by 28% through securely communicating authorization and authentication information across closed firewall ports using the zero trust security model.

## PROJECTS

### BookEasy | ReactJS, NodeJS, AWS, Azure, MySQL

January 2023 - May 2023

- Led the development of a user-friendly Hotel Booking application that streamlined the booking process for travelers. Implemented a solution with MySQL as the database, resulting in a seamless experience for users and managers alike.
- Implemented a seamless user experience for finding and booking hotels, including search, selection, and payment processes, resulting in positive user feedback, elevating the sales, and increased bookings.

### Waste Food Management System | MongoDB, ExpressJS, ReactJS, NodeJS

January 2021 - March 2021

- Developed a production-ready end-to-end web application for donating excess food, improving its location efficiency to 25% by incorporating Google Map API.
- Saved more than 3300 pounds of food from events, hotels, and restaurants and delivered it to people in need, saving donors 45% time.

### Text-Utility | Django, Python, JavaScript, CSS, HTML

May 2021 - June 2021

- A very handy text tool where you can change between lower-case and upper-case letters, where you can capitalize, uncapitalize, convert to mix case and transform your text in different formats according to your needs.

### All in One Compiler | NodeJS, JavaScript, jQuery, Ajax, Flex, Yacc, C

December 2020 - March 2021

- Designed a web compiler for university students and faculties with 4+ features, including the first & follow, left factoring, left recursion, token generation, and accelerating the learning process.

## ACHIEVEMENTS

- Received Gold Medal for securing the first position in a department of more than 150 students.
- All India Rank (AIR) 09 in NCAT (National Creativity Aptitude Test) Exam Category 3.
- ACM ICPC Rank 7 - 2022 East Central Regional Contest.
- HackerRank Problem Solving (5 Star) and CodeChef (Highest Rating 1847 - 4 Star).
- Hash Code - Google's Coding Competition Global rank: 5350.