

AGNEL INSTITUTE OF TECHNOLOGY AND DESIGN

Assagao, Goa – 403507
Electronics and Communication Engineering

Internship Viva Presentation (2025–26)

Industry Mentor

Mr. DEVANSHU JOSHI
Founder, iMeta Technologies,
Mapusa, Goa

Faculty Mentor

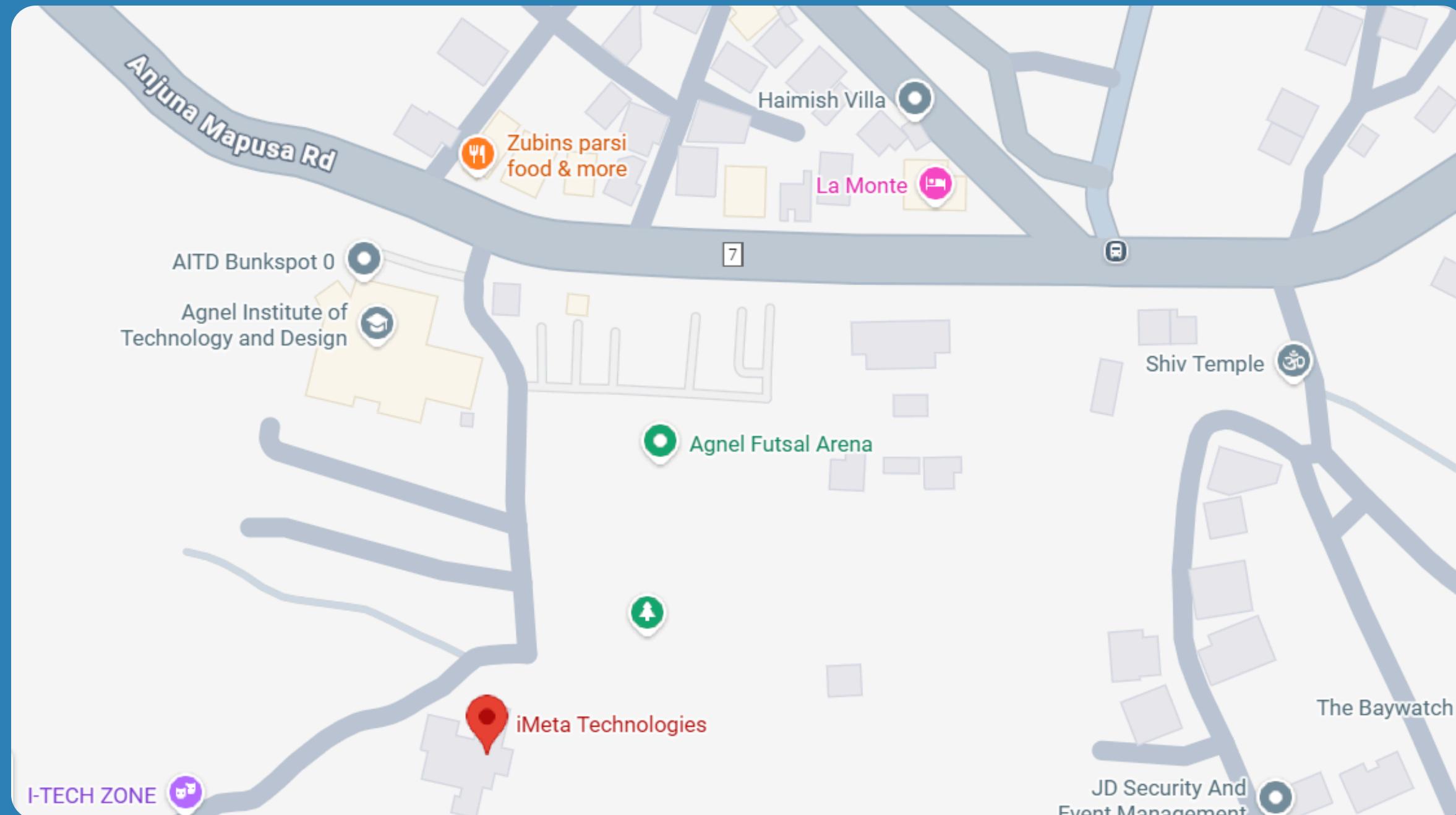
Mrs. Needhi Gaonkar
Asst. Professor
ECE Department

Presented by: **SAHIL PANDURANG SUTAR** (22EC34)

Web
Development
Internship



Company Location and Internship Mode



Company Location:

iMeta Technologies, Mapusa,
Goa, India

Mode of Internship:

Offline (On-site)

Internship Duration:

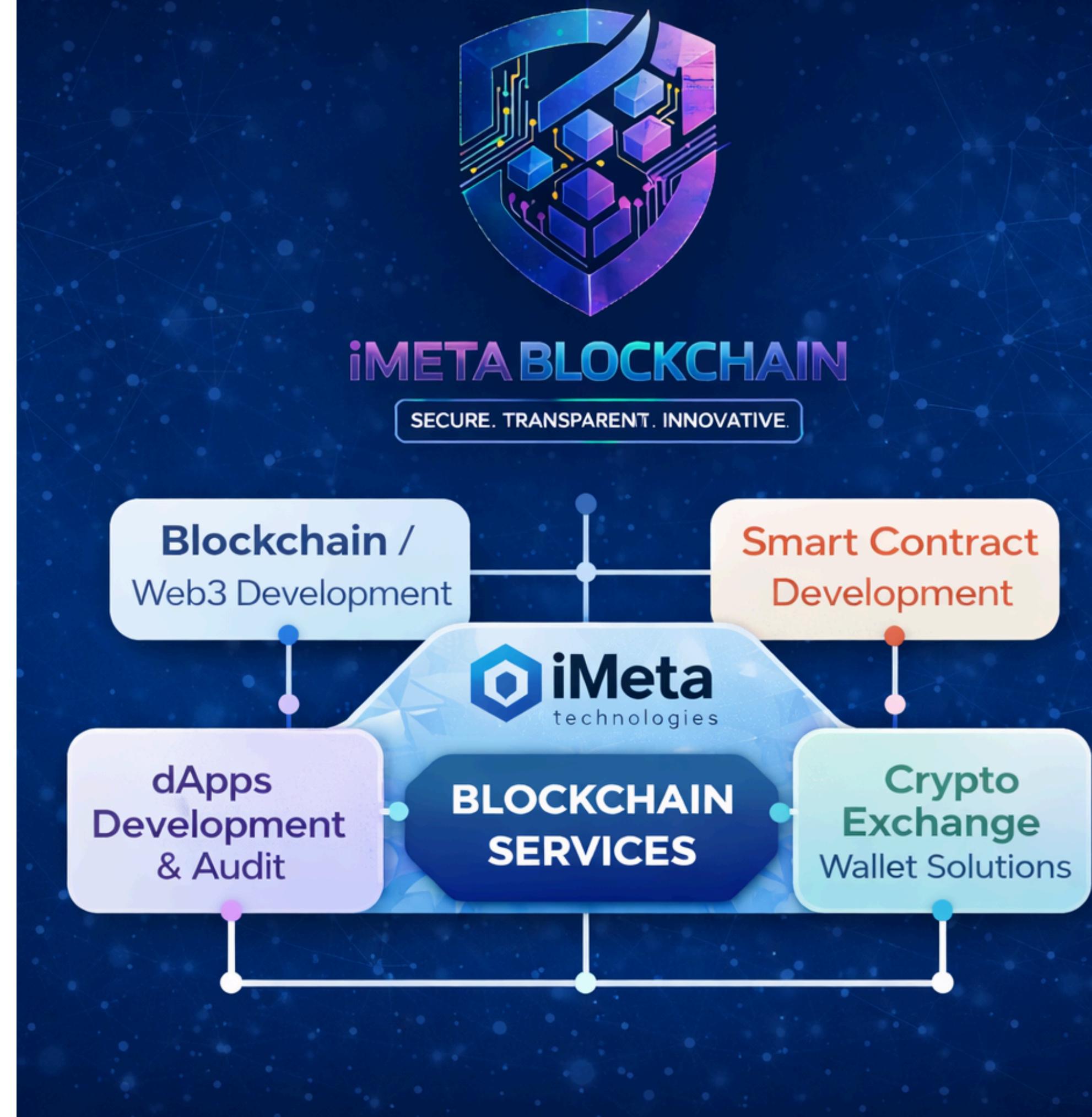
14 July 2025 – 06 September
2025 (8 Weeks)

Internship Role:

Full-Stack Web3 Developer

Mentorship Experience & Service Portfolio

During the internship, I received direct mentorship from **Mr. Devanshu Joshi**, the founder of iMeta Technologies. This experience fostered my independence and enhanced my skills through regular discussions and constructive feedback.



Weeks 1-4 Overview

WEB WALLET & TRANSACTION LEDGER

Introduction to Blockchain

During the first week, I was introduced to blockchain technology, exploring fundamental principles, decentralization, and its transformative potential in various industries.

Backend Development

Weeks 2 focused on backend development using Node.js, Express, and MongoDB, where I learned to create RESTful APIs to facilitate communication between the front end and the blockchain.

Frontend Development

In weeks 3 and 4, I transitioned to frontend development using React.js, gaining hands-on experience in building user interfaces that interact seamlessly with the blockchain components.

Web3 Integration

My work included integrating Web3 functionalities with MetaMask and ethers.js to enable user interactions with the blockchain, enhancing the overall user experience in the decentralized application.

Wallet Manager

Enter Name

Create **Fetch**

Send Tokens

Recipient Address

Amount BNB **Send**

Verify Transaction

Transaction Hash **Verify**

Scan to copy wallet

BNB: 0.001066245

USDT: 51.0

USDC: 2.0

Send Tokens

0xd1DA742373108cC97B23C3C88f0F9E7419Cb6DD4

1 USDT **Send**

TX Hash: [0xc29a9e277bb818a5354c2bf2534e8a96e32ee555b48fabb36753155ebf5b2718](#)

Verify Transaction

0xc29a9e277bb818a5354c2bf2534e8a96e32ee555b48fabb36753155ebf5b2718 **Verify**

Wallet Manager

sahil

Create **Fetch**

Address: 0xa43477e8E849a2Df7D18b2226536268cecF3A6a3

Private Key: 0xecdc47a4c1c66344ed98e15c17c537ddb9ac6f7827b81a5ff861f39102046485

Mnemonic: hungry basic person left arrive blush mimic skill taste scheme hand find

Show QR Code

Scan to copy wallet

BNB: 0.001066245

USDT: 51.0

USDC: 2.0

Wallet Manager

sahil **Create Wallet** **Fetch Wallet**

Address: 0xa43477e8E849a2Df7D18b2226536268cecF3A6a3

Private Key: 0xecdc47a4c1c66344ed98e15c17c537ddb9ac6f7827b81a5ff861f39102046485

Mnemonic: hungry basic person left arrive blush mimic skill taste scheme hand find

BNB: 0.00127602

USDT: 4.0

USDC: 3.0

Send Tokens

0xd1DA742373108cC97B23C3C88f0F9E7419Cb6DD4

1 USDC **Send**

TX Hash: 0x24770bd6c7ac5ba3013c7818ebb9edfa4ec9e0ae203613c391c8c40488b3befc

Weeks 5-8 Progress

DECENTRALIZED ACCREDITATION REGISTRY

Smart Contract Development

During these weeks, I developed **smart contracts** for a decentralized certificate registry, focusing on ensuring secure and efficient transactions on the blockchain platform.

Authentication System



An authentication system was implemented utilizing JWT to ensure secure user access, establishing robust backend logic for identity verification throughout the application.

Frontend Dashboard



I designed and developed a comprehensive frontend dashboard using React, enabling intuitive user interactions and effective management of certificate-related activities within the decentralized application.

End-to-End Integration



The culmination of the internship involved integrating all components, leading to thorough testing and deployment of the application, ensuring a seamless user experience and functionality.

Certificate Registry

Welcome back! Please sign in to your account

Username

Enter your username

Password

Enter your password

Sign In

Don't have an account?

[Sign Up](#)

Link Your Wallet

Connect your wallet to complete your account setup



MetaMask

Connect using your MetaMask wallet to securely link it to your account



[Connect MetaMask Wallet](#)

Certificate Registry

0xd1da...6dd4

Connect

Logout

Info

Wallet disconnected. Connect to begin.



Admin Dashboard

Manage accreditation, issue, and verify decentralized certificates.

Step 1: Get Accredited

Enter your college's name to request accreditation from the administrator.

AITD

Request Accreditation

Step 2: Issue Certificate

Student Name (e.g., Jane Doe)

Course Name (e.g., Intro to AI)

Roll Number (e.g., A-007)

26-08-2025

Check Duplicate

Issue On-Chain

Registry

Connected: 0xd1da...6dd4

Disconnect

Logout

Info

Waiting for MetaMask confirmation...



Step 1: Get Accredited

Your accreditation is approved! You can now proceed to the next step.

Step 2:

SAHIL
ECE
22EC34

Cancel Confirm

26-08-2025

Check Duplicate Issue On-Chain



Step 3: Verify Certificate

cert-znw6pnrr5f9

Verify Certificate

✓ Verified! (Source: cache)

```
{"_id": "68ad4885795dfcd8b14b433",  
"certificateId": "cert-znw6pnrr5f9",  
"studentName": "SAHIL",  
"course": "ECE",  
"rollNo": "22EC34",  
"dateOfIssuing": "2025-08-26",  
"issuedBy": "0xd10A742373108cC97B23C3C88f0F9E7419Cb6DD4",  
"issuedAt": 1756186753,  
"txHash": "0xfc3322553b8da6d89186b6a180b9d2475edac9bd1d41c42e673ee53c5ac793f4"  
}
```

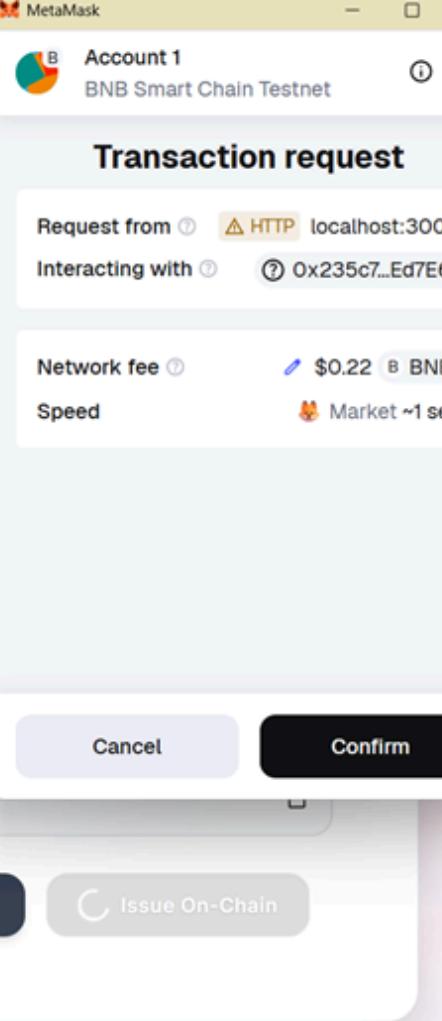
Student Dashboard

Verify the authenticity of your academic certificates.



Verify a Certificate

Enter Certificate ID to verify



Learning Outcomes

Key Technical and Conceptual Insights

Technical Learnings

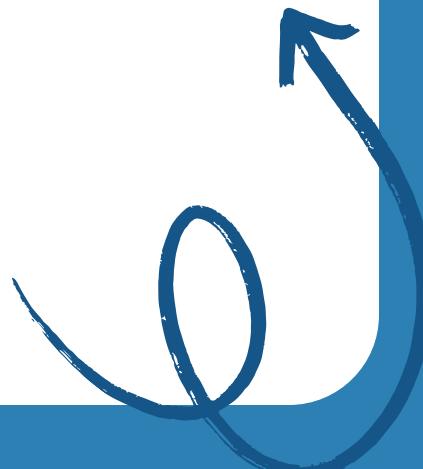
Gained proficiency in **Solidity smart contracts**, enabling effective blockchain interaction and backend development using Node.js, Express, and MongoDB for dynamic applications.

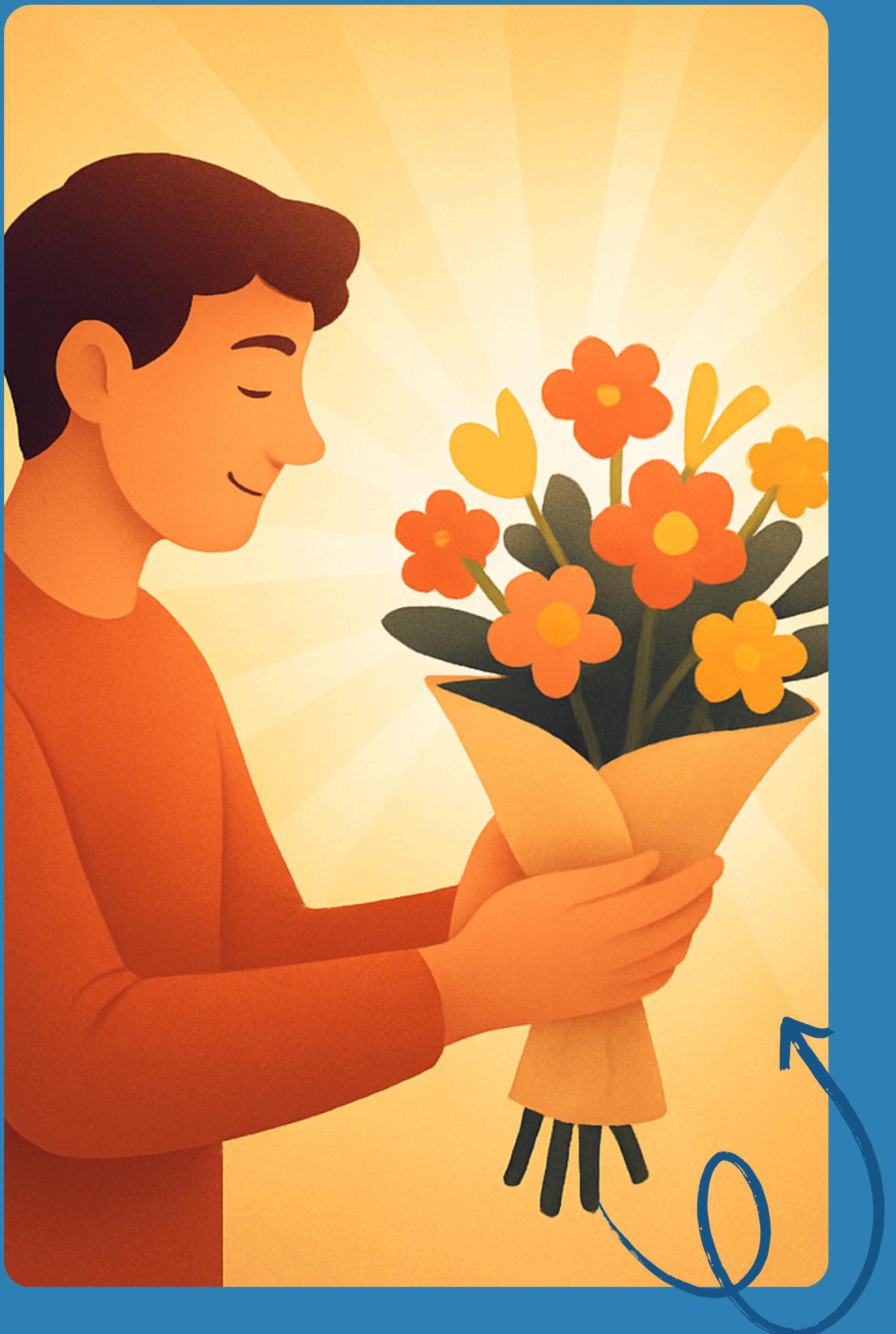
Conceptual Learnings

Developed an understanding of **Web2+Web3 hybrid architectures**, mastering decentralized identity concepts and the significance of blockchain security and trust in modern software solutions.

Decentralized Identity

Explored the implications of **decentralized identity systems**, focusing on secure data handling and user autonomy while integrating seamlessly with existing Web2 applications and infrastructures.





THANK
YOU

Thank you for your time and attention.