

Mohd Zaid Sarwar

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EDUCATION

Inderprastha Engineering College, Ghaziabad

Aug '19 - Jun '23

Bachelors of Technology in Computer Science and Engineering | Percentage: 78.2

Sarvodaya Bal Vidyalaya, Jafrabad

Jul '16 - Mar '18

12th - Physics, Chemistry, Mathematics (PCM) | Percentage: 75.8

EXPERIENCE

Software Engineer

Mar '23 - Present

Colorplast Systems Pvt. Ltd | Noida

A renowned digital card manufacturing based in India, Colorplast supports industries like finance, banking, telecom, retail, healthcare, & transport to offer unrivalled user experiences.

JAVACARD

- Developed **SIM** and **USIM APIs** in **Java**, enhancing the functionality and **interoperability** of **SIM** applications.
- Developed the **Get-Status command** in **Java**, enabling retrieval of **SIM** or **SIM application status** for better monitoring.
- Optimized **load command** in **Java**, achieving a **65% reduction** in processing time for **enhanced performance**.
- Designed and Developed an **event registry system** to manage events, like **external** and **remote file update event**.
- Implemented the **C-MAC security algorithm** in **Java**, securing **GP commands** and ensuring data integrity.

JAVACARD APPLETS

- **IMEI-Locking Applet:** Developed the **IMEI-Locking applet** in **java**, for enhanced **sim security**, enabling **anti-theft functionalities**. Implemented core logic for **IMEI-based device authentication**, and **locking** mechanisms.
- **Multi-IMSI Applet:** Developed the **Multi-IMSI applet** for **SIM cards**, enabling automatic **network switching** to optimize connectivity.
- **Welcome Message Applet:** Developed the **Welcome Message applet** utilizing **USIM APIs** to deliver customizable, on-screen greetings and notifications, enhancing user engagement and service branding.

OASIS

- Developed **EAP (Extensible Authentication Protocol)** features in **C**, contributing to secure **SIM authentication** processes.
- Developed **GBA (Generic Bootstrapping Architecture)** features in **C** to support secure **network access** and **authentication**.
- Developed the **SHA security algorithm** in **C** for data **encryption** on **SIM cards**, enhancing data protection.

AMUNRA

- Developed the **Get-Identity command** in **C**, a key feature for **5G technology**, improving device identification capabilities.
- Developed **Suspend and Resume** features in **C**, ensuring efficient management of **SIM application states**.

Web Developer Intern

Oct '21 - Nov '21

Spark Foundation | Noida

The sparks foundation is working to bring parity in education, making sure children have equal opportunity at success.

- Developed and integrated a secure **Razorpay payment gateway** for online transactions.
- Built the module using **HTML, CSS, and JavaScript** to ensure smooth **user experience**.
- Tested and deployed the payment flow to enable reliable donations.

PROJECTS

Coaching Management System [Link]

- Build a **Spring boot backend** for a coaching management system to manage students, teachers, performance with **RESTful APIs**.
- Implement **CRUD APIs** with **MySQL** and **Hibernate** ensuring efficient data handling.
- Validate **APIs** with **Postman** to guarantee accuracy and reliability.

Text Editor [Link]

- Developed a **React-based text editor** with **export** functionality, allowing users to download their content as **.txt** and **.pdf** formats for convenient sharing and archiving.
- Designed a clean, **responsive UI** with centered controls and **textured background** to enhance ease of use and aesthetics across devices.

TECHNICAL SKILLS

C/C++, Java, Java Applet, UICC, USIM, ISIM, OTA, Amd-B, Global Platform, ETSI Standards, 3GPP Standards, Keil, Git