
PROFESSIONAL SUMMARY

Software Engineer with hands-on experience in IAM, authentication systems, and backend development, specializing in Keycloak, OIDC, and secure identity workflows. Proficient in Java, JavaScript, and React, with a strong foundation in backend system design. Proven ability to design scalable backend architectures, deliver secure authentication solutions for enterprise clients, and build dashboards and dynamic platforms. Strong in analysis, development, and debugging.

EXPERIENCE

Software Engineer Level 1 | Grootan Technologies | Chennai

May 2024 – Present

- Contributed to Keycloak migration (v24 → v26), resolving breaking changes in custom admin UI extensions, React upgrades, and authenticators, ensuring backward compatibility of IAM flows.
- Designed and implemented real-time bi-directional MSSQL synchronization between Azure cloud and on-prem systems using SymmetricDS, enabling hybrid cloud adoption with zero data loss.
 - Configured triggers, conflict handling, and queue-based recovery to ensure reliable sync even during server downtime.
- Improved Super App backend architecture by implementing LLDs for extensible components including User Action Processor, XML Parser, and Session/State Management.
- Built the SparkZen Admin Portal, delivering analytics dashboards, scheduling, and review workflows; accelerated delivery by ~30% (30 → 20 days) using GPT-assisted development.
- Conducted Matrix protocol & Synapse server analysis for TI-Messenger, delivering POCs on federation, encrypted messaging (Olm/Megolm), and push notification flows.

Junior Software Engineer (Intern) | Grootan Technologies | Chennai

Jun 2023 – May 2024

- Contributed to Keycloak migration (v19 → v21), assisting in development, and debugging authentication flows, themes, and IAM configurations.
 - Extended Keycloak's brute-force mechanism into a custom OTP resend brute-force mechanism, improving security and consistency.
- Developed IAM & User Management modules for KOBIL Worksphere, including OIDC flows, IdP-initiated SSO, and tenant-to-tenant token exchange.
- Configured and demonstrated LDAP user federation and synchronization for enterprise IAM clients.

PROJECTS

Device-Centric Authentication – Passwordless IAM (POC)

<https://deviceauth.keerthivibisan.com>

- Designed a passwordless, device-centric authentication system where trusted devices act as the primary identity factor.
- Implemented a cryptographic challenge–response flow inspired by PKI to prevent phishing and credential replay attacks.

Docs Online – Real-Time Collaborative Document Editor

<https://docsonline.netlify.app>

- Built a Google Docs–like platform with real-time multi-user collaboration and a one-click document lock feature.

Cryptography Chat App – Encrypted Messaging

<https://cryptography.netlify.app>

- Developed a real-time end-to-end encrypted chat application ensuring message confidentiality via symmetric encryption.

TECHNICAL SKILLS

- Languages:** Java, JavaScript
- Frameworks & Platforms:** Quarkus, React
- IAM & Security:** Keycloak, OIDC, SSO, LDAP
- Databases & Cache:** MSSQL, PostgreSQL, MySQL, Redis
- Tools & DevOps:** Git, Docker, GPT-based Developer Tools

ACHIEVEMENTS

GROOT OF THE QUARTER – Q2 2024

Awarded 'Groot of the Quarter' for outstanding performance and technical excellence on the 2nd Quarter of 2024.

BIT's Hack 22 – Winner

Won a 48-hour hackathon by developing a Special Lab Portal with admin and student modules.

Built features to track and manage complete history of student lab activities, improving visibility and operational efficiency.

EDUCATION

Bannari Amman Institute of Technology

Bachelor of Technology in Computer Technology | CGPA: 9.2

2020-2024

Sathy, India