

Sahisnu Selvaraj

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EDUCATION

- **Amrita Vishwa Vidyapeetam** Tamilnadu, India
Bachelor of Technology - Computer Science and Engineering; GPA: 8.23 July 2017 - June 2021

SKILLS SUMMARY

- **Languages:** Java, C, C++, Python, Swift, Solidity, JavaScript, SQL, Bash, Unix Shell
- **Frameworks:** Spring Boot, Web, Batch, MVC & Security, Kafka, RxSwift, UIKit, Flask, Gatling, Yocto, React
- **Tools:** Jenkins, Docker, GIT, XCode, SumoLogic, Appium, Selenium, BlackDuck, Terraform, Truffle, Ganache
- **Platform&DB:** Linux, macOS, Windows, AWS, GCP, MongoDB, PostgreSQL, MySQL, SQLite

EXPERIENCE

- **Software Development Engineer (Full-time)** **Amazon** Oct 2022 - Present Chennai
 - **Productizing platform modernisation:** Working with leadership and PMs to productize a. ReactNative based Launcher application for critical alerts and dialogs; b. Secure storage and access mechanism using ARM TrustZone trusted environment for secrets c. Rendering stack GKT+ upgrade to get latest UI features and flexibility
 - **Encryption:** Implemented Folder-Based Encryption framework which provides a fully-managed solution for applications who consume Create&Delete encrypted folder APIs, the framework takes care of Encrypted write and Decrypted read and also manages the encryption key. Negligible KPI differences approx **1%** regression. This helped increasing **customer trust** on new devices like Scribe offering note taking capabilities **adds more value** to secure storage
Stack: C++, Boost libs, keyring, fscryptctl, Kernel modules - FScrypt
 - **Media Transfer Protocol (MTP):** Owned the E2E design & implementation of the USB transfer protocol migration of Kindle device, from legacy (from **1st gen**). Reduced **98%** of user data corruption, **4x** performance, anti-jailbreak, enabler for filesystem encryption & upgrades.
Stack: C, Bash shell, tizen mtp-responder, kernel modules - libcomposite, GadgetFS, ConfigFS
 - **Kindle Platform:** Onboarded security Open-source fixes of **8+** components incl Network application & data-link layer libs, compression, unix utilities. Leveraged HW acceleration for AES using a crypt library with new ARM instruction, reduced **50%** latency
- **Software Engineer II (Full-time)** **NortonLifeLock** Jul 2022 - Oct 2022 Chennai
 - **Intelligence Service (Research):** Led the design of MVP from Norton research project and architected a fault-tolerant cloud-native microservice and was responsible for efficacy drafting to aid the productization. Instrumented load/performance tests and optimised the performance to **2 TPS**
Stack: Python; Flask; Redis; Celery; AWS - S3, ECS; GCP; PostgreSQL; Docker, Jenkins
- **Software Engineer I (Full-time)** **NortonLifeLock** Jun 2021 - Jun 2022 Chennai
 - **Image Upload Service:** Designed and developed async REST APIs for CRUD operations, setup the encrypted storage and containerised service deployment, the service handles max throughput of **5 uploads**
Stack: Java; Spring suite; AWS - S3, SQS, KMS, ECS, ALB; MongoDB; Jenkins
 - **BatchMaster service:** Designed and owned the end-to-end implementation, QA & CICD deployment of a master service which is a HTTP batch dispatcher, response aggregator and Stream notifier(Kafka producer)
Stack: Java; Kafka; AWS - Lambda, API Gateway, SQS, CloudWatch, SAM; Cucumber; Jenkins
 - **Data Privacy Project(GDPR, CCPA):** Designed and implemented serverless autonomous system which provisions the functionality for **Right to be forgotten** data subject rights' to all LifeLock customers.
Stack: Java; MongoDB; AWS - Step function, Lambda, SAM; Docker
 - **LifeLock Identity iOS app:** Worked on iOS app for new feature offering to Japan called Social Media Monitoring, it was a great success which led to fast-follower extension - **SMM-2.0** and the iPhone app is rated **4.3/5** stars
Stack: SwiftUI; RxSwift; XCUITest; TestNG
- **Software Intern (Internship)** **NortonLifeLock** Jan 2021 - Jun 2021 Chennai
 - **HomeTitle feature:** Helped develop the data layer for Kafka consumer microservice, functional automation, setup CICD pipelines. Created PM/Dev insights dashboards and alarms, observed throughput around **20,000** records per week
Stack: Java; Spring suite; MongoDB; Cucumber; Jenkins; SumoLogic
 - **DWM & ID Advisor:** Automated & Optimised the functional suites for Android and iOS mobile apps to aid the EMEA-wide(**14** countries) launch.
Stack: TestNG; Appium; AWS DF(DeviceFarm)

PATENTS AND PUBLICATIONS

- A Method for Land Registry by utilizing Ethereum Platform - Innovation Patent, Australian Govt
- A Product Authentication Scheme for Supply Chain system via Smart Contracts and Facial Recognition
- An Efficient and Novel Buyer and Seller's Distributed Ledger Based Protocol Using Smart Contracts - Springer

HONORS

- Meta/Facebook Global Hackathon: Secured a place in top 250 in the world, awarded winner prize gift card
- NortonLifeLock Execute: Smart & Scrappy - Rewarded for great teamwork and collaboration across teams