

KUSHAL AMARA CHANDRASHEKAR

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EDUCATION

University of Southern California,

Los Angeles, USA

Master of Science in Computer Science, **GPA:** 3.65/4.00.

Jan 2024 - Dec 2025

Coursework: Analysis of Algorithms, Database Systems, Machine Learning for Data Science, Information Retrieval & Web Search

Bangalore Institute of Technology,

Bengaluru, India

Bachelor of Engineering in Information Science and Engineering, **GPA:** 9.41/10.00.

Aug 2019 - May 2023

Coursework: Data Structure, Operating Systems, Object-Oriented Concepts, Unix, Web Technologies, Artificial Intelligence, Big Data

TECHNICAL SKILLS

Programming Languages: Java (proficient), Python (proficient), C/C++ (intermediate), JavaScript

Web Development: HTML, CSS, PHP, Node.js, React.js, Microservices (Java Spring Boot), Rest API, SQL, MongoDB

DevOps and Cloud Technologies: Docker, Kubernetes, AWS, Git, Kafka, Terraform, Maven, Gradle

Testing Frameworks: Selenium, JUnit, TestNG, Mockito

Machine Learning: PyTorch, Pandas, Numpy, Scikit-Learn, Matplotlib, Statsmodels, Seaborn

EXPERIENCE

Telstra,

Bengaluru, India

Associate Software Engineer,

Jul 2023 - Dec 2023

- Streamlined event reconciliation between upstream and downstream services by building a Splunk dashboard to ensure data consistency through log comparison. This enabled effective tracking of data flow and quick identification of discrepancies.
- Designed FTL invoice templates and evaluated PDF generation tools (iText, Jasper, Aspose, OpenHTML, StirlingPDF) to identify the best solution for efficient, accessible invoice creation while ensuring proper content order for visually impaired users.

Telstra,

Bengaluru, India

Business Trainee Intern,

Feb 2023 - Jul 2023

- Automated GitLab group management using Python scripts, GitLab API, and GitLab CI/CD. Implemented approval rules, enforced merge request approval workflows, and optimized member data handling, leading to a time savings of over 20 hours per month.
- Collaborated on Infrastructure as Code (IaC) to automate AWS Lambda provisioning with Terraform and Terragrunt, configuring scalable custom Node.js layers to ensure consistency and optimize deployment time for S3 buckets and DynamoDB tables.

PROJECTS

Resilient Email Notification System | Java, Kafka, React, Spring, MongoDB

- Architected and implemented a feature-rich email notification system using Kafka for resilience, ensuring prioritized and sequenced delivery for messages, real-time cancellation, and event logging.
- Developed a responsive UI using React to manage and track email delivery statuses, notification priorities, and cancellations, improving user experience. Used Docker for containerization and Mockito for unit testing to maintain high code quality.

AWS Photo Management System | Flask, AWS (EC2, S3, Boto3), Computer Vision, Deep Learning

- Developed a Python 3 web application for user sign-up and image uploads, utilizing computer vision and deep learning for automatic label generation, hosted on an EC2 instance with a load balancer for improved performance and scalability.
- Utilized Boto3 for programmatic access to AWS services, enhancing functionality through seamless API interactions.

Language Translator | Android Studio, Firebase ML, XML

- Built a mobile application in Android Studio, leveraging Firebase ML for nuanced dialects and seamless translation.
- Empowered users with multi-modal input through text typing, voice recognition via Google Cloud Speech-to-Text, and image uploads for text extraction using Firebase ML Kit, allowing conversion of text and spoken words to the desired language

Book Drive | PHP, HTML5, MySQL, XAMPP

- Formulated a user-centric book platform with a PHP and HTML5 front-end for seamless access, integrated with a robust MySQL back-end on the XAMPP server to optimize the performance and reliability of the book store database system.

Hospital Management System | C++, Android developer Visual Studio, B+ Tree

- Created a patient management platform, facilitating admins and receptionists in uploading and managing patient details using File Structures, alongside developing a user-friendly front-end using C++ and Android developer Visual Studio.
- Integrated the B+ Trees algorithm for efficient file storage and retrieval, optimizing data access and storage capabilities.

PUBLICATION

E-Voting System using Blockchain Technology and Homomorphic Encryption, *International Journal for Research in Applied Science and Engineering Technology* 2023.

- Developed a secure blockchain-based E-voting system using homomorphic encryption and MySQL. Implemented OTP-based authentication via email and built secure web applications, ensuring tamperproof ballots and encrypted data storage.