

# Pranay Kasavaraju

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## EDUCATION

Northeastern University, Boston, MA

September 2022 – May 2024

*Master of Science in Software Engineering Systems*

Coursework: Concepts of Object-Oriented Design, Enterprise Software Design

Indian Institute of Technology Indore, India

July 2015 – May 2019

*Bachelor of Technology in Mechanical Engineering*

## TECHNICAL SKILLS

- **Programming:** Java, C, C++, MATLAB, Arduino
- **Frameworks, Libraries and Tools:** Git, Java-Spring, Spring Boot, Maven, Apache Kafka, Docker, Kubernetes, Splunk, Pivotal Cloud Foundry, Junit, Mockito
- **Database softwares:** PostgreSQL, OracleDB, MongoDB

## PROFESSIONAL EXPERIENCE

Mastercard, India

June 2019 – May 2022

*Software Engineer II, Mastercard Digital Enablement Service (MDES)*

- Implemented cryptographic **signature** for issuer banks using **SHA256** with **RSA** signature algorithm to encrypt the redirect-URL
- Developed **Kafka message consumption** module with a batch size of 10,000 messages and designed database schema with **JSON search index** for storing messages using spring boot and oracle database
- Created **configurable health check** for cryptographic operations (wrapped encrypt and wrapped decrypt) and other downstream systems to ensure proper onboarding and connectivity between systems with an alert frequency of once per every 15 minutes
- Worked on porting legacy Java code to **cloud-based architecture** using Pivotal Cloud Foundry and Spring Boot and enhanced scalability, performance of service and reduced response time by 10%
- Created spring boot application to cater internal customers with **seamless authentication**, enhanced capabilities and 50% reduction in processing time
- Identified and documented design changes for 2 **performance enhancements** and 3 code enhancements (SOLID and DRY principles) in legacy code
- Mentored new joiners in team during initial onboarding by taking sessions on tools and technologies used in team and regularly following up on assigned work

## ACADEMIC PROJECTS

Cafeteria management system: (C++, File I/O)

July 2015 – November 2015

- Programmed a UI with admin and customer modules in **C++**
- Implemented **authentication** for admin module with access to **CRUD** operations on items on the menu, billing history, and updating seating capacity and verified it with 5 users
- Formulated **sorting** by price and name of the items on menu and assessed it with **1000 records**

Modular robot for agricultural purposes: (MATLAB, Android Studio)

June 2018 – December 2018

- Fabricated a **4 DOF 4R** Serial Manipulator using Quadrature Encoder motors and a Differential wheel base to mount manipulators with a budget of **1000\$**
- Developed an **android application** with Android studio to remotely control robot and tested it in **100m** range
- Derived optimal joint configuration for sprayer positioning by applying **inverse kinematics**

## POSITION OF RESPONSIBILITY

- Acted as **Creative head** for 'Industry-Academia Conclave' event in 2017 and got **appreciation mail** from **director** of IIT Indore
- Organized **Ugadi** event as **Coordinator** for IIT Indore Telugu Association in 2017 which was attended by over **150** students