

# Rajkumar Kumaravelu

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## Education

Northeastern University, Boston, MA - Master of Science in Information Systems

Expected May '24

Pondicherry University, Puducherry, India- Master of Business Administration

July '14 - May '16

Anna University, Chennai, India - Bachelor of Engineering in Mechanical Engineering

Aug '10 - May '14

## Technical Skills

**Programming Languages:** Java, JavaScript

**Web Development:** HTML, CSS, React.js, Redux, Node.js, Spring, Hibernate, Servlets, JWT, Microservices, XML, JSON

**Database & Distributed Systems:** SQL, MongoDB, Redis, Elastic Search, Kafka

**Cloud:** AWS (lambda, ECS, EC2, S3, EBS, S3), Pulumi, Packer, Docker, Google Cloud

**Tools:** Git, Postman, Mockito, JUnit, OAUTH, GitHub Actions

## Professional Experience

**National Payments Corporation of India, Chennai, India**

Associate Certification Operations

Jan '22 – Aug '22

- Optimized data validation via REST API calls, achieving a 30% reduction in input error
- Implemented data persistence using Hibernate, with the database which improved the performance by 20%
- Collaborated in code reviews for improvising testing tools which improved testing precision by 10%
- Optimized server-side API code reducing the average API response time by 30%.
- Established GitHub Actions workflow, automating tests and ensuring a 25% increase in code quality

**Straive, Puducherry, India**

Senior Subject Matter Expert

May '16 – Dec '21

- Designed and developed website layouts and user interface features using HTML, CSS, and React.js
- Created reusable components using React Hooks for dynamic and maintainable codebase
- Developed and maintained Central State Management through the Redux store leading to a 15% reduction in bugs
- Participated in agile code reviews, ensuring quality, resulting in a 25% reduction in post-release issues.

## Projects

**Network Structure and Cloud Computing**

Sep – Dec '23

- Developed Rest API using Spring boot to leverage AWS services for a web application
- Performed Continuous integration using GitHub Actions and built AMI using Packer
- Utilized Pulumi to create AWS infrastructures such as EC2, RDS, IAM Users, VPC, CloudWatch, SNS, SES
- Implemented Elastic Load Balancer to distribute traffic across EC2 Instances and Auto Scalers to scale instances

**Insurance Plan**

Jun – Aug '23

- Built Rest API to validate incoming JSON requests against a schema
- Implemented OAuth standard for securing REST API
- Flattened the data after validation, stored it in REDIS
- Enhanced data processing capability using RabbitMQ's queuing system
- Leveraged ElasticSearch to optimize search and enhance data accessibility

**Acelt**

Mar – Apr '23

- Developed a web-based tutoring app using HTML, CSS, Bootstrap, JSP, Spring Boot
- Established JPA mapping by integrating Hibernate with SQL using Spring Boot
- Manipulated the data to generate a PDF document using a third-party library

**Food Lucious**

Mar – Apr '23

- Developed Online Food Delivery app using MVC architecture with Spring Boot, MySQL
- Implemented session management functionality to manage user sessions securely
- Participated in regular GitHub Pull Request reviews and refactoring existing codebase

**DataCafe**

Mar – Apr '23

- Designed and Normalized Entity-Relationship model using MySQL Workbench
- Executed Stored Procedures, Views, Triggers, and utilized Tableau for data analysis, visualization

**Flatmate Expense Tracker**

Nov – Dec '22

- Developed a dynamic web application using React, HTML5, CSS3, SASS, and Bootstrap
- Implemented Node, MongoDB, and Express.js for backend functionality
- Integrated JWT token for secure authentication and bcrypt mechanism for password encryption