# A red and white circle with black text AI-generated content may be incorrect.A hexagon with blue and white text Description automatically generatedGOPI THUMULA

Bridgeport, CT 06604  +1-475-302-9381  gopithumula0611@gmail.com [](mailto:tpesaru@my.bridgeport.edu) [Gopi LinkedIn](https://www.linkedin.com/in/gopi-t-0a5513221/)

# EDUCATION:

**Sacred Heart University** | *Masters, Computer Science* (GPA: 3.8/4.0) **Mar 2023 – May 2024**

Coursework: Analysis of Algorithms, Cloud Security, Network systems, Ethical Hacking, Web Based Application and Development.

**TKR College of Engineering and Technology |** *Bachelors, Electrical Engineering (*GPA: 3.8/4.0) **Aug 2018 – Jun 2022**

Coursework: Embedded Systems, Cyber-physical Systems & Security, AI & ML for electronic and Communication and Networking

# TECHNICAL SKILLS:

**Programming Languages & Technologies**: Java 1.6/1.7/1.8/11/17, C, Python, JavaScript

**Web Technologies**: HTML5, DHTML, CSS2/3, jQuery, AJAX, Bootstrap, AngularJS, Angular 9/11/12, ReactJS, Next JS and NodeJS

**Operating Systems**: Windows 11/10/8/7/NT/XP/2000/98, Unix, Linux, Mac OSX

**Application/Web Servers:** Apache Tomcat, WebLogic, WebSphere, JBOSS

**Java Frameworks:** Spring MVC, Hibernate, Spring Boot, JSP, Servlets, JDBC, EJB

**IDE Tools and Debug tools:** IntelliJ, Eclipse, NetBeans, Spring Tool Suite (STS), Visual Studio, WebStorm and Maven, Ant, Gradle

**Database:** Oracle 9i/10g/11g/12c, SQL, PL/SQL, MySQL, DB2, NoSQL, Dynamo DB

**Cloud Platforms**: AWS (EC2, S3, Elastic Beanstalk, CloudWatch, DynamoDB, SNS, IAM), Azure and GCP

**Web Services and Tools**: SOAP, Restful, GraphQL, WSDL, JAX-RPC, JAX-RS JAX-WS, JAX-B and Dockers, Kubernetes, Jenkins CI/CD.

# CERTIFICATIONS:

* **AWS Developer Associate.**
* **Oracle Certified Java Programmer.**

# WORK EXPERIENCE:

**MasterCard** | *Reston, VA |* ***Java Developer*****May 2024 - Present**

* Developed a **responsive UI** using **React.js, TypeScript, and Bootstrap**, ensuring accessibility (WCAG 2.1) and cross-browser compatibility
* Optimized **performance and state management**, integrating RESTful APIs efficiently with React Query and Axios.
* Contributed to **CI/CD pipelines, Agile workflows, and front-end testing**, ensuring seamless deployments and high-quality UX.
* Tech Stack: Java 11/17, J2EE, Spring Boot, REST API, Microservices, OAuth2, MongoDB, AWS, GCP, Angular 12, Node.js, Kafka, IntelliJ, TypeScript, Maven, JUnit, Mockito, CircleCI, Prometheus, Grafana, SAFE Agile.

**Sacred Heart University** | *Fairfield, CT* |***Graduate Teaching Assistant*****Mar 2023 - May 2024**

* **Published a Research paper** on machine learning-based malware detection in IEEE conference/ICSPIS 2024
* Developed and trained **ML models** using **Java-based libraries (Weka, Deeplearning4j)** on datasets like **CICIDS 2017 and Kaspersky**, improving malware classification accuracy.
* Enhanced detection capabilities by 30%, reducing false positives through **Decision Trees, SVM, and Neural Networks**, contributing to cybersecurity research.
* **Tech Stack:** Java, Machine Learning (Weka, Deeplearning4j), Malware Datasets (CICIDS 2017, Kaspersky), Data Preprocessing, Model Evaluation.

**Cognizant Technology Solutions** | *Hyderabad, India |* ***Java/J2EE Developer*****Feb 2022 – Mar 2023**

* Modernized the banking platform by transitioning to a microservices architecture using **Spring Boot, Spring Cloud, and Kafka**, improving performance, scalability, and real-time transaction processing.
* Implemented secure and efficient **APIs with OAuth2, JWT** authentication, and cloud migration **(AWS),** deploying applications in Docker containers and orchestrating with **Kubernetes** for high availability.
* **Enhanced UI/UX using ReactJS and Angular 9**, optimized databases (**MySQL, DynamoDB**), and ensured code quality with JUnit, Mockito, and CI/CD pipelines through Jenkins and SonarQube.
* **Tech Stack:** Java (Spring Boot, Spring Cloud), REST API, OAuth2, JWT, Kafka, ReactJS, Angular 9, Docker, Kubernetes, AWS (EC2, S3, IAM, DynamoDB), MySQL, Oracle, DynamoDB, Jenkins, SonarQube, JUnit, Mockito, Postman, CI/CD, Agile.

# PROJECT EXPERIENCE & PAPPER PUBLISHED:

**An Ensemble-Based Malware Detection Model Using Machine Learning | IEEE ICSPIS 2024.**

* Published in a **prestigious IEEE journal/ICSPIS 2024**. Demonstrated a **significant improvement in malware detection accuracy** through Java-based ML algorithms.
* Contributed to **cybersecurity research**, showcasing the effectiveness of machine learning and java in real-time malware detection and mitigation. **optimize feature extraction and model performance**, improving detection capabilities by 30%.

**Card Benefits Billing System Modernization**

* Modernized Legacy System – Replaced the Lotus Notes-based Card Benefits Database with a microservices-driven architecture using **Java, Spring Boot, MongoDB, AWS, and Kafka**, enabling accurate billing and configurable billing cycles.
* Enhanced UI & Performance – Developed a **ReactJS and Angular-based responsive UI**, improving usability, accessibility, and operational efficiency, ensuring seamless user experience and faster processing of billing files.