

Madhu Chandrika Balram

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EDUCATION

DePaul University Master's in Computer Science	Chicago, USA Expected - Aug 2026
REVA University Bachelor of Technology in Electronics and Communication 3.7 GPA	Bangalore, India Jun 2022

PROFESSIONAL EXPERIENCE

Custom Software Engineering Associate <i>Accenture (Technologies: Heroku, Java, Heroku Postgres, Papertrail)</i>	Dec 2022 – Jul 2024 Bangalore, India
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- Developed and optimized Java-based applications on Heroku, enhancing deployment and database management.
- Designed and managed RESTful APIs to support seamless client-server communication.
- Proactively monitored application logs using Papertrail, resolving performance bottlenecks to improve reliability.
- Collaborated with cross-functional teams to troubleshoot software and database issues, implementing efficient solutions.
- Conducted system performance reviews to improve software efficiency and reduce downtime.

Programmer Analyst Trainee Intern <i>Cognizant (Technologies: Java, Selenium WebDriver, MySQL, Maven)</i>	Feb 2022 – Jun 2022 Bangalore, India
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- Developed automated test scripts using Selenium WebDriver and Java for Oracle PeopleSoft, improving testing efficiency and accuracy.
- Integrated MySQL with the testing framework, optimizing data management for automated tests and enhancing the overall workflow.
- Collaborated with team members to enhance the automation testing process, reducing reliance on manual testing and improving overall test reliability.

PROJECTS

Movie Review Application (Full Stack Development)	Jan 2025
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Technologies: Spring Boot, React.js, MongoDB, RESTful APIs, HTML, CSS, JavaScript, Postman, Git

- Developed a full-stack movie review application using Spring Boot for backend and React.js for frontend.
- Designed and implemented RESTful APIs for managing movie data and user reviews, integrating MongoDB Atlas.
- Built an interactive React-based UI with HTML and CSS, enabling users to browse movies and submit reviews.
- Utilized Postman for API testing and configured CORS in Spring Boot for seamless frontend-backend communication.

Real Time Health Monitoring System Using IOT	Aug 2021 – May 2022
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Technologies: Arduino IDE, Embedded Systems, Data Visualization Tools- MATLAB, ThingSpeak

- Developed an IoT-based robotic solution using Arduino MEGA for automated medication dispensing and vital sign monitoring (SpO2 and heart rate).
- Transmitted real-time data to ThingSpeak using MATLAB, enabling real-time graphical analysis and data visualization.
- Automated healthcare tracking to improve patient care through accurate, real-time monitoring.

TECHNICAL SKILLS

Programming Language — C/C++, Java, Python, JavaScript, HTML, CSS
Frameworks & Technologies — Spring Boot, React.js
Database Technologies — MongoDB, MySQL, Heroku Postgres, DBMS
Cloud & DevOps Tools — Docker, Heroku
Version Control — Git, GitHub
Testing & Automation — Selenium WebDriver, Postman
Log Management Tools — Papertrail, Logtail
Optimization — Data structures, algorithms, object-oriented programming, Distributed systems

CERTIFICATE

Salesforce - Salesforce Certified Administrator	Mar-26-2024
Microsoft - Introduction to Programming Using Python	Sep-01-2020
Udemy - The complete Full-Stack Web Development Bootcamp	Feb-04-2025