Madhu Chandrika Balram

✉ mbalram@depaul.edu   📞 +1 (708) 906-2741   💼 LinkedIn   ⏻ GitHub

EDUCATION

DePaul University   Chicago, USA
Master's in Computer Science   Expected - Aug 2026

REVA University   Bangalore, India
Bachelor of Technology in Electronics and Communication | 3.7 GPA   Jun 2022

PROFESSIONAL EXPERIENCE

Custom Software Engineering Associate   Dec 2022 – Jul 2024
Accenture (Technologies: Heroku, Java, Heroku Postgres, Papertrail)   Bangalore, India

- 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   Feb 2022 – Jun 2022
Cognizant (Technologies: Java, Selenium WebDriver, MySQL, Maven)   Bangalore, India

- 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

Personal Portfolio Website   Feb 2025
Technologies: HTML, CSS, JavaScript, GitHub

- Designed and developed a personal portfolio website to showcase projects, technical skills, and professional experience.
- Implemented smooth navigation, animations, and well-structured content sections for an intuitive user experience.
- Deployed the portfolio on GitHub Pages, ensuring easy accessibility and streamlined version control.

E-Commerce Product Store (Full Stack Development)   Feb 2025
Technologies: React.js, Node.js, MongoDB, HTML, CSS, JavaScript, Gi, Express.js, Render, RESTful API

- Developed a full-stack product store enabling users to browse, add, update, and delete products.
- Built a dynamic React.js frontend with React Router for seamless navigation and Axios for efficient API communication.
- Designed a RESTful API using Express.js & MongoDB, implementing secure CRUD operations for product management.
- Deployed the backend on Render, managing API requests and database operations efficiently.

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

- Developed an IoT-based robotic system using Arduino MEGA for automated medication dispensing and real-time vital sign monitoring
- Integrated ThingSpeak and MATLAB for real-time data transmission and graphical analysis, enhancing automated healthcare tracking for improved patient monitoring.

TECHNICAL SKILLS

Programming Language — C/C++, Java, Python, JavaScript, HTML, CSS
Frameworks & Technologies — React.js, Node.js,
Database Technologies — MongoDB, MySQL, Heroku Postgres, DBMS
Cloud & DevOps Tools — Docker, Heroku, Render
Version Control — Git, GitHub
Testing & Automation — Selenium WebDriver
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-05-2025