

Yashwanth Raj Varadharajan

Washington, DC, USA 20037 | yashwanthraj6383@gmail.com | +1(202)-372-6401

[GitHub](#) | [LinkedIn](#) | [Portfolio](#) | [Google Scholar](#)

TECHNICAL SKILLS

- **Programming Languages:** JavaScript, HTML, CSS, Python, SQL, SwiftUI, R.
- **Tools and Frameworks:** Node.js, React, Express.js, Tailwind CSS, Bootstrap, MySQL, RESTful API, PostgreSQL, Firebase, Git, GitHub, Power BI, Postman, Microsoft Excel, Oracle, UI/UX Design (Figma), AWS, MATLAB, Xcode.
- **Development Practices:** API Integration, Agile Development, Continuous Integration/Continuous Deployment (CI/CD), Responsive Design, Code Quality Assurance.
- **Soft Skills:** Critical Thinking, Leadership, Creativity, Time Management, Networking, Adaptability, Communication.

RELEVANT WORK EXPERIENCE

Parkli **California, USA**
iOS Software Developer **March 2024 – December 2024**

- Enhanced user experience by leading the full-stack development of a parking reservation app, building Figma prototypes and translating them into a seamless SwiftUI interface, while integrating Firebase for backend services.
- Boosted team productivity by mentoring and managing a team of 7 developers, optimizing workflows, conducting code reviews, and ensuring efficient UI component integration.
- Improved code quality and deployment speed by implementing CI/CD pipelines using GitHub Actions and Jenkins, optimizing development efficiency.

Access Healthcare Services **Tamil Nadu, India**
Associate Developer **April 2023 – July 2023**

- Reduced Revenue Cycle Management (RCM) implementation time by 40% by leveraging Echobot, a Robotic Process Automation (RPA) driven platform, to streamline and automate the RCM process.
- Elevated call center operation efficiency by developing Echo Talk, a React.js based web tool that integrates RESTful APIs for patient record retrieval and ML-powered voice analysis for transcription.
- Improved resume processing efficiency by contributing to the RParser Project, helping develop and train models for resume extraction and classification into seven predefined roles.

Finlatics **Maharashtra, India**
Business Analyst **October 2022 – December 2022**

- Enabled data-driven decision-making by utilizing Power BI and Microsoft Excel to analyze consumer behavior and product preferences, extracting actionable insights.
- Optimized product strategy by analyzing consumer behavior data on smartphone features and providing recommendations aimed at achieving a CSI score above 9.

PROJECTS

Cryptoplace Application **February 2025 – April 2025**

- Built a real-time cryptocurrency dashboard using React, integrating CoinGecko API to fetch live data and display key metrics such as prices, market trends, and volume changes, with interactive charts powered by React Google Charts.
- Engineered a responsive interface with React Router DOM, ensuring seamless navigation across devices and optimized performance with Vite for fast development and build processes.

Supplier Management Web Application **January 2024 – May 2024**

- Developed and deployed a web application using Oracle APEX to streamline supplier management for a grocery store, enabling efficient management of supplier profiles, product inventory tracking, and access to order history in a centralized SQL database.
- Designed a user-friendly interface and implemented database optimization techniques to improve data accessibility and enable seamless updates, fostering stronger supplier relationships and operational efficiency.

PUBLICATIONS

ML based side channel power attack analysis of VLSI implementations **December 2022 – May 2023**

Advances in Microgrid Technologies (pages 185 - 213). Elsevier. DOI: [10.1016/B978-0-443-22187-3.00008-4](https://doi.org/10.1016/B978-0-443-22187-3.00008-4)

- Conducted a machine learning-based side-channel power attack analysis on VLSI implementations, leveraging Random Forest algorithms to identify vulnerabilities by analyzing hardware emissions like power usage.
- Implemented custom and ASCAD datasets to assess encryption strength against ML-based attacks. Results demonstrated robust security of custom implementation, while revealing vulnerabilities in the ASCAD dataset that enabled successful key recovery.

EDUCATION

The George Washington University, School of Engineering & Applied Science **Washington, DC, USA**
Master of Science in Computer Science

- CGPA: 3.8/4

Vellore Institute of Technology **Tamil Nadu, India**

Bachelor of Technology, Electronics and Computer Engineering

- CGPA: 3.6/4