APARNA UDAYAKUMAR

Full Stack Developer

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PROFILE

Experienced Full Stack Developer with 5 years of expertise in building secure, scalable web applications using the MERN stack. Strong background in developing and consuming RESTful APIs, implementing robust authentication and authorization workflows, and managing version control and CI/CD pipelines with Git, GitHub, and Azure Services.
Skilled in integrating Microsoft Graph API for secure data access and automation.
Currently expanding capabilities in Microsoft Power Platform, focusing on building intelligent Copilot agents and automating business workflows with Power Automate and Azure services.
Proven ability to deliver high-quality, maintainable solutions that align with enterprise security, performance, and usability standards.

SKILLS

- **Languages:** JavaScript (ES6+), TypeScript, HTML5, CSS3, JSON
- **Frameworks & Libraries:** ReactJS, NextJS, NodeJS, ExpressJS, Redux, jQuery, Bootstrap, Material UI
- **Tools & Platforms:** Git, GitHub, Webpack, Babel, NPM, VSCode, Postman, Azure DevOps, Azure Portal, Power Platform, Microsoft Graph API, Genesys Cloud CX
- **Testing & Optimization:** Jest, React Testing Library, Unit Testing, Lighthouse, Web Vitals, Web Performance Optimization, RESTful Web Services
- **Databases:** MongoDB, Azure CosmosDB, SQL
- **Cloud & DevOps:** Microsoft Azure (App Services, Blob Storage, Azure AD, Key Vault), Azure Functions, Azure Logic Apps, GitHub Actions, CI/CD Pipelines
- **AI & Automation:** Power Automate Flows, Microsoft Copilot Studio Agents, AI Builder, Prompt Engineering, Data Automation
- **Concepts & Best Practices:** Data Structures & Algorithms, Web Accessibility (WCAG), Responsive Design, Agile Methodologies (Scrum), Secure Coding Practices, API Integration, Authentication & Authorization

EXPERIENCE

TATA CONSULTANCY SERVICES   (2020 - Present)

- Designed and implemented user-centric web interfaces using **ReactJS**, improving user engagement by **25%** through enhanced interactivity and responsiveness.
- Developed unit test cases with **Jest** and **React Testing Library**, increasing code reliability and reducing bugs by **30%**.
- Enhanced web performance by **30%** through **code-splitting**, **lazy loading**, and other advanced optimization techniques. Collaborated cross-functionally with UI/UX designers and product managers in an **Agile/Scrum environment**, accelerating release cycles by **20%**.
- Improved web accessibility and ensured **WCAG 2.1** compliance, expanding user inclusivity by **15%**.
- Leveraged **MongoDB aggregation pipelines** for complex query handling, resulting in a **20% improvement** in backend data processing performance.
- Conducted **code reviews** and mentored junior developers, fostering a culture of best practices, continuous learning, and improved team productivity.
- Partnered with QA teams to design comprehensive **test strategies**, reducing post-release defects by **40%** and ensuring high-quality deliverables.
- Designed bots using the **Genesys Cloud CX platform**, enabling smart routing, intent recognition, and faster customer resolution.
- Processed and analyzed over **100M+ records** efficiently using optimized Node.js backend services and Azure data connectors.
- Well-versed in **Azure fundamentals**, including **App Services**, **Blob Storage**, **Key Vault**, and **Azure Active Directory**, with hands-on deployment experience.
- Integrated **Microsoft Graph API** for secure access to calendar, user profiles, and document services within enterprise-grade web applications.
- Maintained source control and CI/CD pipelines using **Git**, **GitHub**, and **GitHub Actions**, ensuring smooth and automated deployments.

- Developed and deployed **Copilot agents** using **Microsoft Copilot Studio**, automating common user workflows and enhancing digital support experiences.
- Built **Power Automate flows** for seamless process automation, integrating **Dataverse**, **Teams**, **Outlook**, and **SharePoint** to streamline business operations.

PROJECTS

- **Job Portal Web App**
  Developed interactive and dynamic web components using ReactJS and Redux, improving UX and increasing page interactions by 25%.
  Focused on performance optimization and modular component design.
  Technologies: ReactJS, Redux, HTML, CSS, JavaScript, jQuery, Azure

- **Human Resource Management System**
  Built a scalable, end-to-end HR management solution to address critical talent needs for organizations.
  Developed modules for employee lifecycle, performance management, and reporting dashboards.
  Technologies: ReactJS, Redux, Node.js, ExpressJS, HTML, CSS, JavaScript, Azure, Git

- **Talent Acquisition Application**
  Designed and implemented a web app to manage client hiring pipelines using React and Redux.
  Integrated with backend APIs to track and update candidate status in real-time.
  Technologies: ReactJS, Redux, Node.js, ExpressJS, HTML, CSS, JavaScript, Azure, Git

- **Customer Data Management System**
  Created a robust internal system using ReactJS and CosmosDB to handle millions of records with real-time form updates and data fetching.
  Integrated chatbot functionality with backend services to enhance accuracy and reduce response time.
  Contributed to multiple high-impact modules, resolving root cause issues and improving performance.
  Technologies: ReactJS, Redux, Node.js, ExpressJS, CosmosDB, Azure, Git

- **Technical Documentation Assistant (AI-Powered Web App)**
  Built a React and Node.js-based web application to assist developers with technical documentation and code snippets.
  Integrated Azure OpenAI to generate context-aware answers and document templates.
  Technologies: ReactJS, Node.js, Azure OpenAI, HTML, CSS, JavaScript

- **AI Chat Application with RAG Architecture**
  Developed an intelligent chat application that uses Azure OpenAI, Azure Cognitive Search, and retrieval-augmented generation (RAG) for document-aware responses.
  Enables real-time, AI-powered query handling for large datasets and enterprise documentation.
  Technologies: ReactJS, Node.js, Azure OpenAI, Azure Cognitive Services, Azure Search, ExpressJS