ARAVIND D

Email | Portfolio | LinkedIn

Skills

Technologies: Next.js, React.js, Node.js, Webpack, Rollup, TanStackQuery, Spring Boot, Git, AWS, Postgres, Docker.
Languages: TypeScript, JavaScript, Java, SQL, Go.

Experience

2021– present

Senior Software Engineer, Altair *(acquired by **Siemens DISW)*** – Bengaluru, India. 2024– present

Altair Rapidminer: 2024– present

- Architected and led the migration of 10+ applications to a **micro-frontend** architecture, enabling independent deployments and improving **scalability** and **developer experience**.
- Designed and maintained multiple **reusable React packages** shared across multiple applications, reducing duplicated UI logic and accelerating feature delivery.
- Established a **monorepo** to manage shared libraries, including a **centralized auth service** used across frontends.
- Developed a communication library with **RxJS** to enable reliable communication between micro-frontends.
- Implemented secure cross-application integration between Panopticon and RapidMiner using **iframes**, **BroadcastChannel**, and event-driven communication.
- Created a reusable **navigation hook**, standardizing routing behavior across apps and eliminating full page reloads.
- Introduced a **frontend caching** layer using **TanStack Query**, generating typed hooks from OpenAPI specs with **Orval**, reducing redundant API calls and improving data consistency.
- Optimized frontend build and bundle size by 22%, resulting in faster load times and improved runtime performance.
- Implemented large file downloads using **StreamSaver**, enabling **direct-to-disk** streaming for GB-scale files.
- Authored a CLI tool to scaffold micro-frontend applications with standardized configurations, reducing new application setup time by 90%.

Software Engineer, L&T Technology Services – Bengaluru, India. 2021– 2024

Smart-TV App Development (AstroGo, StringTV, Etisalat): 2022– 2024

- Created reusable React components shared across six clients with distinct UIs in a single application.
- Revamped the UI of the Astro-Smart-TV app, elevating the user experience.
- Optimized app performance by **30% reduction** in the initial load time improving overall responsiveness.
- Implemented **i18n** for multiple languages, including Hebrew, Arabic with right-to-left support.
- Introduced a vertical scrolling component which optimizes **DOM rendering** for datasets surpassing 1000 items.
- Executed **API migrations** from a single endpoint to **personal** and **shared** APIs, improving backend efficiency.
- Engineered a QR Code-based **Authentication** module for seamless login on Smart-TVs.
- Enhanced user experience by implementing an **audio codec** fallback feature in the **DashJS Player**.
- Established a smart retry mechanism for failed API calls, aligning with backend rate limiting to ensure consistent and reliable API consumption.
- Contributed to the migration of DashJS Player to the latest version, improving playback stability.

Zee Entertainment Smart-TV App Development: 2021– 2022

- Crafted a robust subtitle feature that enabled the client to control text related settings from the backend.
- Resolved several issues in **Shaka Player** to ensure smooth playback and optimal user experience.
- Revised the menu component and enabled backend control of menu items.

Others

- Debugged and contributed to a fix in **facebook/react library**, addressing a missing attribute *(PR #26130).*
- Authored multiple React packages of interactive SVG Maps. *(Packages)*
- Devised a CLI tool in **Go** to batch process videos using FFMPEG (*Github*)
- JLPT N5 certified with intermediate **Japanese language** skills.

Education

PSG College of Technology – B.Tech in Information Technology 2020