CHARLES FRANCIS

Visa Type: 3-year Post-Study Work Visa

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(in) **Aakaash Charles**   ( ) **CharlesFrancis19**

Career Objective

Aspiring Software Engineer pursuing a Master of Information Technology, focused on building user-friendly web and app experiences. I enjoy developing modern React + TypeScript interfaces, creating reusable components, and iterating quickly in agile teams. With hands-on experience in Next.js, Tailwind CSS, and beginner/intermediate backend work (Node.js / PHP basics), I'm keen to contribute to fast-moving products that improve real user outcomes—through clean code, strong problem-solving, and continuous learning.

Technical Skills

- Frontend: HTML, CSS, JavaScript, React, TypeScript, Next.js, Tailwind CSS (reusable components, responsive UI, workflow/page implementation, improving existing pages)
- Mobile: Flutter (app UI + feature development), basic familiarity with React Native; comfortable with Android Studio/Xcode environments
- Backend: Node.js (beginner/intermediate) for API endpoints and server-side logic; Java basics
- API & Integrations: REST API design/consumption, authentication (JWT/session basics), data mapping & transformations
- Databases: MySQL/MariaDB, SQL querying, basic schema understanding
- Tools & Delivery: Git, Agile collaboration, code reviews, debugging, familiarity with build tooling (Webpack/Babel)
- Testing & Quality: Unit testing basics, regression testing, clean code practices and eagerness to learn standards

Work Experience

Exaba
Project Intern   **Nov 2025 — Feb 2026**

- Built core features for the Exaba Mobile Photo Backup App, syncing photos/videos to an S3-compatible cloud platform.
- Implemented auth + token handling with secure storage and reliable API error handling.
- Developed key UI flows (onboarding, media library, settings) with a focus on performance and usability.
- Worked iteratively with Git, fixing issues fast and keeping code clean and maintainable

Cyfotok Infosec
Full-Stack / Application Developer   **Jan 2024 — Nov 2024**

- Delivered end-to-end web features using Next.js (React/TypeScript) with PHP back-end support for APIs and server-side logic.
- Built reusable, responsive UI components and improved existing pages for better UX and performance.
- Integrated REST APIs with JWT/session-style auth basics, handling validation and error states cleanly.
- Followed clean Git workflows with code reviews, testing basics, and iterative delivery in an agile setup.

Vakil Search
Full-Stack Developer (Project Developer)   **Jun 2023 — Jan 2024**

- Led development of a client-oriented reporting and management portal with structured API and UI enhancements.
- Optimized backend workflows and automation processes, resulting in faster data delivery and reduced manual effort.
- Improved UI responsiveness and accessibility through targeted component updates and design refinements.

Projects

AI-Driven Health Risk Stratification Platform
Stack: Next.js 15, FastAPI, MongoDB, Render, Vercel, Python (XGBoost, scikit-learn), TypeScript
- Built a full-stack AI SaaS dashboard predicting cardiovascular and diabetes risks.
- Designed secure APIs with FastAPI using schema validation via Pydantic + Zod.
- Deployed a serverless ML inference pipeline on Render & Vercel with automated GitHub Actions CI/CD.
- Integrated LLM-based patient report summaries, demonstrating AI-assisted decision support.
- Applied PostgreSQL-style query optimization for large FHIR datasets.

Secure Vault
Stack: Next.js 14 (App Router + RSC), TypeScript, Tailwind CSS, Node.js (Express), PostgreSQL, AWS S3 + Cognito
- Developed a production-ready file-management SaaS platform for secure cloud storage.
- Implemented serverless API architecture with Next.js route handlers & Zod validation.
- Designed PostgreSQL schemas for user auth, file metadata, and audit logs.
- Integrated S3 pre-signed uploads, Sentry error monitoring, and rate-limited uploads.
- Evolved TurboRepo + GitHub Actions workflows to enable one-click deployments.

Taniwha Trails – Māori Cultural Storytelling Web Experience
Stack: Next.js 15, MongoDB, Render, Vercel, TypeScript
- Developed Taniwha Trails, an interactive storytelling website where users explore Māori-inspired lake legends through choice-based story paths.
- Built a responsive UI with Next.js (React/TypeScript) and Tailwind CSS, focusing on clean navigation and accessible layouts.
- Implemented reusable components and dynamic routing to support multiple stories, scenes, and outcomes.
- Optimized performance and UX (fast page loads, consistent styling, mobile-friendly experience).
- Managed development with Git and an iterative workflow, refining features based on testing and feedback.

Education

University of Waikato
Masters of Information Technology
2025 — 2026

Sri Shakthi Institute of Engineering
Bachelors of Engineering in Electronics and communication
2020 — 2024

Additional Information

- **Languages:** English, Tamil

- **Certifications:**
  - Java Certification - HackerRank
  - MySQL Certification HackerRank
  - Web Development - Udemy
  - Node JS - Udemy
  - React - Udemy

- **Interests & Strengths:** I enjoy exploring new technologies, mentoring students, and collaborating on creative software projects. Outside of tech, I'm passionate about community volunteering, meeting new people through Rotaract, and sharing ideas that inspire teamwork and growth. I'm a friendly, curious, and hands-on person who loves learning, helping others, and turning ideas into something meaningful.