



TUSHAR LACHMAN

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PROFESSIONAL SUMMARY

Computer Science student at RMIT University, minoring in Artificial Intelligence & Machine Learning, who ships production software end to end. Built and sold a medical practice management platform now in daily clinical use at a Jakarta family practice, plus four further full-stack products across web, mobile and Python — several with real users, all integrating third-party and AI APIs, and all documented at tusharlachman.dev. Seeking a summer internship (Nov 2026 – Feb 2027) or a graduate role from July 2027, in any tech role — software, data, ML, platform, QA or product.

Work rights: Student visa, unrestricted hours over the summer break; graduate visa from August 2027.

PROJECTS

Medical Practice Management Platform

June 2026 – Present

Built independently; now licensed to the practice on a paid monthly subscription

React · TypeScript · Supabase · Deno · Capacitor · Twilio — private repo, walkthrough at tusharlachman.dev/work/medical

- Built and sold a platform now in daily clinical use at a Jakarta family practice, turning a self-initiated project into recurring monthly revenue — it replaced the record-keeping I used to do there by hand.
- A TypeScript monorepo on npm workspaces — React dashboard, two Android apps (Capacitor), shared document templates — behind 66 Deno edge functions and 31 PostgreSQL migrations, covered by 269 unit tests.
- The browser holds only the read-only anon key; every write goes through an edge function, so the privileged surface is 66 named operations rather than a database the client can reach.
- An insurance claims module that fills insurers' own PDFs — by field name for AcroForms, by coordinate map for scanned ones — signed and numbered from an atomic counter only once the doctor approves.
- WhatsApp Business via Twilio for bilingual invoices, prescriptions, reminders and booking, plus Google Calendar and Drive, and Firebase push configurable per channel.
- Claude (Opus 5) as an eight-tool assistant drafting reports and certificates behind a propose-then-approve flow, so nothing clinical is sent without the doctor's review.

Jarvis — Personal Life OS

June 2026

Next.js 16 · React 19 · TypeScript · Supabase · Claude API · Google APIs — github.com/TusharLachman25/jarvis-life-os

- A dashboard unifying tasks, calendar, health and finance across two countries: 38 REST endpoints, 10 migrations, and Google OAuth with token refresh across Calendar, Tasks and Gmail.
- Reconciled two wearable ecosystems that do not interoperate — Fitbit through Google Health's live API, Galaxy Watch through a Samsung Health export Claude parses — keyed by source id, so a re-import is a no-op.
- Claude turns uploaded bank statements and Gmail receipts into structured transactions held for review; AUD and IDR tracked separately against a 30-day rate average.

Locked In — Social Fitness App

April – May 2026

React Native (Expo) · TypeScript · Supabase · Gemini API · EAS Build · Vercel — github.com/TusharLachman25/Locked-In

- Shipped a squad-based workout tracker in daily use by my friend group — ~5,000 lines of TypeScript — as an Android APK through EAS Build, with a web build on Vercel.
- Stories, leaderboards, a feed and direct messaging on Supabase Auth, Storage, Realtime and row-level security, with push sent by a Postgres trigger through pg_net rather than by the app.
- Gemini vision reads a smartwatch screenshot and auto-fills activity, distance, duration, pace and calories.

Kitchen OS — Pantry & Nutrition Assistant

February – March 2026

Python · Streamlit · Supabase (PostgreSQL) · Google Gemini · pandas · Altair — github.com/TusharLachman25/kitchen-os

- A pantry, recipe and nutrition tracker in ~3,500 lines of Python — Streamlit over a 66-function data layer.
- Automatic pantry deduction when a recipe is cooked, normalising between weight, volume and count.
- Gemini for a conversational recipe assistant with persistent chat sessions, and food-photo macro logging.

Other Projects

2026

- **Bets — The Vault** · React Native, Supabase — a shared ledger for informal bets: two wager types, one Postgres table, an APK and a web build from one source. github.com/TusharLachman25/bets-the-vault
- **This portfolio** · Next.js 16, React 19 on Vercel — tusharlachman.dev, every project documented screen by screen.

- **Machine learning:** a CNN over 20,280 colon-tissue patches against logistic-regression, random-forest and SVM baselines, split by patient — the honest split: 0.852 macro-F1 against a 0.90 target, reported as not met.
- **Cloud:** a Flask REST API on DynamoDB and S3 deployed three ways to compare — EC2 under gunicorn, ECS Fargate behind a load balancer, and Lambda behind API Gateway.
- **Systems:** a multithreaded file copier in C — bounded queue, three mutexes, two condition variables, valgrind-clean — and a heap allocator on sbrk with first-fit and best-fit.
- **Constraint optimisation:** exam timetabling in Answer Set Programming with Clingo, hard and weak constraints separated, checked by an independent Prolog validator.
- **NLP & networks (team):** a six-stage YouTube pipeline — VADER and RoBERTa sentiment, LDA and BERTopic topics, then NetworkX centrality, Louvain communities and homophily.
- **Security:** a three-party GPG exchange between real Linux accounts, and a default-deny iptables firewall in Kali.

EXPERIENCE

Information Systems Intern

August 2023 – January 2024

Makmur Jaya Abadi | Jakarta, Indonesia

- Digitized and organized accounting records into Excel and Google Sheets, ensuring data accuracy for analysis.
- Automated repetitive entry with formulas and advanced spreadsheet features, and worked with accounting staff to find further processes worth automating.

Part Time Medical Assistant

June 2020 – April 2023

Dr Varkha's Teleconsultations | Jakarta, Indonesia

- Digitized patient records and compiled laboratory and x-ray reports, notes and other pertinent data, carefully protecting patient information.
- Supported medical staff by answering phones and making appointments. The platform above is the software that replaced this job.

EDUCATION

Bachelor of Computer Science — Minor in Artificial Intelligence & Machine Learning

Expected July 2027

RMIT University, Melbourne, Australia

Elementary School, Middle School and High School

Completed April 2023

National High Jakarta School, Jakarta, Indonesia

- Completed Cambridge IGCSE, AS Level and A Level examinations.

Balvikas Student

August 2011 – August 2023

Sathya Sai Education, Jakarta, Indonesia

SKILLS

- **Languages:** Python, TypeScript, JavaScript, Java, C, C++, SQL, Prolog, HTML, CSS
- **Frameworks:** React, React Native (Expo), Next.js, Node.js, Flask, Streamlit, Tailwind CSS, Capacitor
- **Cloud & DevOps:** AWS (EC2, ECS, Lambda, S3, DynamoDB), Docker, Vercel, EAS Build, Firebase, Git
- **Backend & Data:** PostgreSQL, Supabase, REST API design, serverless functions, OAuth 2.0, migrations
- **AI & Data Science:** Claude API, Google Gemini (text and vision), PyTorch, scikit-learn, pandas, NetworkX
- **Practice:** Unit testing (Vitest, pytest), monorepos, CI to Vercel and EAS, technical writing

COMMUNITY SERVICE & INTERESTS

The Care Club — volunteer every 2-4 weeks with a charity group providing food, groceries, haircuts and medical services to families in need, alongside a GP, optician and dentist.

LANGUAGE

English

Bahasa Indonesia

Hindi

Mandarin

Proficient (C2)

Advanced (C1)

Beginner (A1)

Beginner (A1)