

Mahesh Kumar Muddunuru

Software Engineer: backend, full-stack and mobile

Vancouver, BC / muddunurimahesh@gmail.com / maheshmuddunuru.com / linkedin.com/in/m-mahesh-kumar / github.com/Maheshmuddunuru

Canadian Permanent Resident, no sponsorship needed / Live work: tapngame.com, tiffinware.com, dakshinfoods.ca

SUMMARY

I build software that businesses run on, and then I keep it running. At Fortinet I work on test automation and release sign-off for FortiClient. On my own I have built three production systems end to end: a sports booking app on the App Store and Google Play, the platform a Vancouver food business runs its kitchen and deliveries on, and a SaaS that meal-subscription kitchens rent. I am at my best where money, concurrency and data access meet: Postgres, payments, and the tests that prove they work.

PROFESSIONAL EXPERIENCE

Software Release QA Specialist (Intermediate)

Aug 2022 - Present

Fortinet, Burnaby, BC (hybrid) - Test Automation and Release Infrastructure

FortiClient is the VPN and endpoint security software companies install on employee laptops, on macOS, Windows and Linux.

- Help decide whether each FortiClient release is safe to ship: review what has and has not been tested, chase failures to root cause with the engineers who wrote the code, and sign off readiness.
- Wrote and maintain a Python test framework that sets up real machines on every supported operating system, runs end-to-end, integration and security tests, and tears them down again.
- Built Jenkins pipelines and a RabbitMQ job queue that spread test runs across a pool of machines, so all three operating systems are tested in parallel instead of one after another.
- Cover SSL and IPsec VPN, ZTNA, SAML single sign-on (FortiAuthenticator, Okta, Azure AD), antivirus, web filtering and upgrade paths. Work with the FortiGate, EMS and FortiAuthenticator teams and mentor junior engineers on our tooling.

SAP BASIS Administrator

Aug 2018 - Oct 2019

ADP Private Limited, Hyderabad, India

- Kept SAP systems running for 150+ enterprise clients including GM, IKEA, Philips and Dell: moving changes from development to production, upgrades and patches, database storage and overnight batch jobs.

INDEPENDENT ENGINEERING EXPERIENCE

Founder and Sole Engineer, TapNGame

Aug 2022 - Present

Sportster Technologies Inc., Vancouver, BC - tapngame.com

A sports booking app: players book courts and join pickup games, venues run their calendar. Live on iOS, Android and the web.

- Venues were taking bookings by phone into a paper diary, and the software that existed was built for salons. I built the Flutter player app, the Next.js venue dashboard and the admin console on one Supabase backend.
- Fixed a captured \$112 payment that had no booking by reordering the flow: the booking is created first, the payment carries an idempotency key, and only a verified, deduplicated Stripe webhook confirms it.
- A support email saying "I can't delete my account" led me to check all 311 database functions; nine more were failing on every call, including booking cancellation. Repaired them in 16 migrations and verified 156 clean deletions.
- Handled two players tapping the same slot with row locks and a hold while they pay; every cancellation path returns capacity through one trigger. Fixed prices computed in UTC instead of the venue's timezone.

Lead Engineer (client work), Dakshin Foods

Jul 2026 - Present

New Westminster, BC - dakshinfoods.ca

The platform a South Indian tiffin kitchen runs on: meal plans, the kitchen, deliveries and the money.

- The owner ran meal plans from a notebook and WhatsApp. I built enrolment and card payments through Clover, a customer portal, a nightly cook sheet and box labels, a dispatch board and a Flutter driver app on the App Store.
- Delivery trips are ordered by Google Route Optimization; one real run went from 93.7 km to 68.6 km. Refused street-only geocodes after one put a box 4.5 km from the right door.
- Found in review that the payment code treated a timeout as a decline, which could have charged customers twice. Modelled a charge as paid, declined or unknown, with idempotency keys and a five-minute reconciler.
- Made the till the single source of menu prices after a dish showed \$6.99 on the menu board and rang up \$9.99. Migrated customers off the previous platform, reading each box by hand because its export was incomplete.

Founder, Tiffinware

Jul 2026 - Present

Vancouver, BC - tiffinware.com

Software that meal-subscription kitchens rent for a flat \$99 a month, with no commission on orders.

- Built after Dakshin, because other kitchens had the same problems: an owner console, a customer portal on each kitchen's own subdomain and branding, and a Flutter driver app live on the App Store and Google Play.
- Fixed an invite flow that turned a kitchen owner into a driver: invites must now match the signed-in email, and a kitchen can never lose its last owner. Card payments were silently rolling back on a Postgres type mismatch; fixed it and made the API surface database errors.
- Box labels for 8 sticker sizes, checked by 300+ automated tests measured in a real browser. Subscription billing is built and gated off while the first kitchens onboard.

SKILLS

Languages: TypeScript, Python, Dart, SQL, Bash

Backend and data: PostgreSQL (row-level security, triggers, functions, locking, migrations), Supabase, REST APIs, webhooks, idempotency, job queues, RabbitMQ

Web and mobile: Next.js, React, Tailwind CSS, Flutter, Riverpod, App Store and Google Play releases

Payments and integrations: Stripe (PaymentIntents, Connect, Subscriptions), Clover, Google Maps Platform, WhatsApp Business API, Resend

Testing and delivery: pytest, Selenium, Jenkins, GitHub Actions, Docker, Vercel

Security and networking: VPN (SSL, IPsec), ZTNA, SAML and OIDC, TCP/IP, Wireshark

AI: Claude Code and the Claude API in daily work, embeddings and pgvector search, on-device speech models

EDUCATION

MSc Computer Science, Lakehead University

2021 - 2022

Thesis: machine-learning detection of client-side man-in-the-middle attacks

BTech Computer Science, CVR College, Hyderabad

2014 - 2018

CERTIFICATIONS

Intel Bug Bounty Program (recognised)

Secure Computer User, EC-Council

SQL Injection, Cybrary