Nawaf Mahmood

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EDUCATION

Toronto Metropolitan University — **Toronto, Canada**

B.S in Computer Science (Co-op) | ***CGPA: 4.10/4.33*** — *Expected Graduation: May 2028*

- **Related Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Software Engineering, Operating Systems
- **Honours:** Dean's List 2023–2026

EXPERIENCE

Sanofi — **Toronto, Canada**

Full-Stack Software Developer Intern | Teams: CX Data & AI, Commercial M&S — *May 2026 – Present*

- Shipped full-stack features to **Newton (Talk to Data)**, Sanofi's company-wide AI platform serving **~700 users** across **5 teams** at **~500 messages/day**, including Microsoft Graph access-group integration, a prompt library, and agent selection
- Led **TraceReview** end-to-end (scoping with agent owners, development, testing) and shipped v1 in **2 weeks**: an agent-observability tool (React, Python) surfacing each Snowflake agent's reasoning, SQL queries, results, and charts in one view
- Cut agent-debugging time **~60%** and caught **~5 production incidents**; generalized it from a Newton-only tool into a platform any team can point at its own agents, already adopted by a second product, RUSH
- On CX Data & AI, built automated ETL pipelines that unify **15+ sources** (SharePoint, Google Analytics, internal systems) into one database powering React / Power BI dashboards

Toronto Metropolitan University — **Toronto, Canada**

Undergraduate Research Assistant, Prof. E. Harley — *June 2026 – Present*

- Built an automated **Python** pipeline chaining four bioinformatics tools (fastp, SPAdes, BLAST, minimap2) to verify gene-editing results from raw DNA-sequencing data, replacing manual inspection across **6 experimental batches**
- Validated assemblies at **99.8% accuracy** and proved the intended edit had silently failed, tracing an unintended copy elsewhere in the genome and redirecting the lab's next round of experiments

PROJECTS

VisualBuild iOS App Store

Next.js, *TypeScript*, *Tailwind*, *Supabase*, *React Native (Expo)*, *Gemini & OpenAI API* — *April 2026 – Present*

- A multi-tenant AI SaaS that re-renders a photo of a house with a proposed renovation in **~30 seconds** across **21 material categories**; live on the iOS **App Store** with **2 businesses** onboarded in early access
- Replaced manual photo upload with an address-to-render pipeline on the **Google Street View API**: pulls three angles, auto-cleans them (wires, cars, neighbouring houses), and renders, so a contractor can quote from an address alone
- Shipped web and native iOS from one backend with **Row-Level Security** and shared JWT auth, keeping AI keys server-side; a backup-model fallback has held **500+ renders** near 100% success through provider outages

TMU Pulse

Python, *Next.js*, *TypeScript*, *PostgreSQL*, *Supabase*, *React*, *Tailwind CSS* — *Jun 2025 – Present*

- A full-stack academic planning platform (GPA tracking, schedule building, course discovery, degree planning) with **500 sign-ups** and **30,000+ visits** at **~100 daily**
- Built a Python / PostgreSQL pipeline that scrapes, normalizes, and indexes **3,700+ course records** across **100+ departments**, plus a Rate My Professors integration, holding **sub-second load times** at scale

ACHIEVEMENTS & ACTIVITIES

RepPal — 1st Place, Sanofi x Snowflake Hackathon — *2026*

- Won **1st place** with an AI system recommending which physicians reps should approach for consent under Canada's one-shot CASL law, backed by a Snowflake consent-propensity model scoring **~300K physicians** (**0.85 AUC**)
- Built a sales-rep view (a web-enrichment agent feeding a personalized outreach strategy) and an admin view with analytics and a **Snowflake Cortex** chatbot

AWS Certified Solutions Architect – Associate (SAA-C03) — *In Progress – Expected 2026*

TECHNICAL SKILLS

Languages: Python, C/C++, Java, TypeScript, JavaScript, SQL
Frameworks & Libraries: React, Next.js (App Router), React Native (Expo), Node.js, FastAPI, Tailwind CSS, React Query
Backend & Data: PostgreSQL, Supabase (Auth, Storage, RLS, Edge Functions), pgvector, REST APIs, ETL pipelines
Cloud & Tools: AWS, Snowflake, Docker, CI/CD, Git/GitHub, Power BI