

Rachael Chan

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EDUCATION

University of Toronto

Toronto, ON

Bachelor of Applied Science in Industrial Engineering + PEY — GPA: 4.0/4.0

Sep. 2025 – Apr. 2030

PROFESSIONAL EXPERIENCE

Product Data Analyst Intern

May 2026 – Aug. 2026

Constellation Homebuilder Systems (Constellation Software Inc.)

Markham, ON

- Built AI agents to generate Power BI paginated reports and dashboards from natural language prompts, delivering a 5x increase in report output and cutting creation time by 90%
- Identified a manual bottleneck in client data delivery and delivered an automated data validation, Excel generation, and Dropbox pipeline with audit logging and error recovery, saving 8 hours/month
- Built a Fabric-authenticated React 19 web app on Microsoft Rayfin with row-level security, giving clients a secure self-service portal to manage their own sales targets

Data Analyst Intern

May 2025 – Aug. 2025

Constellation Homebuilder Systems (Constellation Software Inc.)

Markham, ON

- Built a SQL + SSRS pipeline to transform raw ticket and time log data into client-ready invoices with budget vs. billed breakdowns, cutting manual reporting effort by 10 hours/month
- Developed an SSRS report to aggregate 1M+ ticket and defect records, cutting average lookup time by 50%
- Unified 4 legacy systems into a data warehouse, standardizing schemas to enable consistent downstream reporting

EXTRACURRICULARS

Race Engineering Member

Jan. 2026 – Present

University of Toronto Formula Racing Team

Toronto, ON

- Analyzed high-frequency driver telemetry and built SQL pipelines and Power BI dashboards to quantify performance differences across drivers and identify areas of improvement
- Developed a session segmentation algorithm using speed-threshold filtering to automatically classify driver stints, reducing manual data preparation for race analysis

Data and Digital Launchpad Associate

May 2026 – Present

You're Next Career Network

Toronto, ON

- Owned semantic matching for the Career Fair's Unified Data Engine, a co-built recruiter platform, using OpenAI embeddings to match 3,000+ students to job descriptions across 100+ recruiters.
- Implemented Supabase authentication and role-based access control, securing recruiter and student data and enforcing separate permission scopes across the platform

PROJECTS

Ontario University Metrics – Admissions Analytics Platform | *TypeScript, Next.js, PostgreSQL*

- Built and deployed a public analytics platform giving high school students realistic Ontario university admission benchmarks across 600+ programs and 21 universities, reaching 10,000+ users
- Designed automated ETL pipelines in TypeScript to scrape, clean, and normalize 6,000+ admissions records across 4 years into a PostgreSQL database, enabling all platform queries and visualizations
- Improved program code match rate from 75% to 95% using token set similarity matching and override logic

ConvoSpark AI - Memory Aid for Alzheimer's Patients | *Python, Flask, Socket.IO*

- Built a voice-driven app that transcribes live conversations and answers questions about them in plain language, peer-selected top project out of 78 at the York Region Science & Technology Fair
- Engineered a RAG recall system with OpenAI embeddings, using vector similarity search for semantic retrieval over stored conversation history, achieving 94% accuracy on recall questions

SKILLS

Languages: Python, TypeScript, JavaScript, SQL, Java, MATLAB, VBA

Frameworks & Tools: React, Next.js, Power BI, Tableau, SSRS, PostgreSQL, Microsoft Fabric, Excel, Pandas, Supabase, OpenAI API, MCP, Flask