

JOVAN DOSANJH

☎ 647-657-4875 ✉ jovan.dosanjh@uwaterloo.ca [in linkedin.com/in/jovand](https://www.linkedin.com/in/jovand) github.com/jovandosanjh [globe jovand.co](https://jovand.co)

Technical Skills

Languages: Python, Java, VBA, HTML, CSS, JavaScript, SQL, R

Frameworks & Libraries: React, React Native, Expo, Pandas, NumPy, Matplotlib

Tools & Platforms: Git, GitHub, VS Code, Power Automate, IBM Maximo, Excel (Advanced Macros)

Databases: MySQL, Firebase, Firestore

Experience

Software Developer

Aug. 2025 – Present

Data Analytics Lab – University of Waterloo

Waterloo, ON

- Developed a centralized **CMS** for the Chicago Police Department, managing cases across 77 boroughs, supporting **1,000+ concurrent cases**, and consolidating workflows for over 10,000 officers across multiple divisions
- Engineered **APIs** for real-time police data, boosting data accessibility by **40%** and cutting manual reporting by **25%**
- Designed database schemas and analytics pipelines to streamline case management, improving reliability by **30%**
- Built interactive dashboards with **React** and **Figma**, enabling officers to identify crime hotspots **20% faster**

Software Developer

May 2025 – Aug. 2025

City of Toronto

Toronto, ON

- Managed and developed from the ground up multiple **Python** scripts and **Excel** macros, automating budget reconciliation for **\$150M+** in financial data and saving **100+** hours of manual work on a city-wide project
- Executed complex **SQL** queries to extract and analyze asset performance data from **IBM Maximo**, delivering actionable insights and reports that informed strategies for optimizing resource allocation
- Introduced automation workflows using Excel macros and Power Automate, streamlining high-use resource updates, cutting processing times by **30%**, and enhancing accessibility and usability for project teams

Lead Engineering Specialist

Sep. 2024 – Present

Industry 4.0 Design Team

Waterloo, ON

- Redesigned and led the case competition, enhancing relevance for **200+** participants by using **Python** to analyze City of Toronto transportation datasets, conducting research, and aligning real-world challenges with competition objectives
- Spearheaded business development initiatives, driving **stakeholder engagement** and securing strategic partnerships to expand competition reach and enhance its impact through targeted outreach and negotiation
- Led a cross-functional team, overseeing collaboration between participants, sponsors, and stakeholders to ensure smooth competition execution and timely delivery of objectives

Founder, VP of Technology

Nov. 2023 – Apr. 2024

Conscious Keychains

Ajax, ON

- Co-founded Conscious Keychains, overseeing the **design, sourcing, and manufacturing** of products
- Developed the company's website on **Shopify**, generating over **\$1500** in revenue through online, trade show, and in-person sales by implementing e-commerce strategies such as **SEO** and enhancing user experience
- Secured a charity partnership, donating a portion of profits to support a local mental health organization
- Implemented diverse sales channels and strategies, expanding market reach by **30%** through targeted media campaigns
- Created and executed a social media campaign, gaining over **15,000** views by leveraging platform analytics, creating engaging content, and optimizing posting strategies

Projects

LinkUp | *React Native, Google Maps API, Yelp Fusion API, OpenAI API, Firebase*

Jun 2025 – Present

- Built a cross-platform mobile app in **React Native (Expo)** that finds convenient midpoints for groups, suggests meetup locations, and recommends nearby social venues using **Google Maps, Yelp Fusion, and OpenAI APIs**
- Implemented **Firebase Authentication** + Firestore for secure login, user management, and real-time session data
- Designed an interactive UI with map pins and recommendation cards, collaborating in a two-person dev team via GitHub

Secure File Encryption Tool | *Python, Cryptography, CLI, OOP*

Nov 2024 – Dec 2024

- Developed a modular encryption tool supporting both substitution ciphers and **AES encryption**, with secure key handling, robust error management, and logging to ensure reliable file protection
- Designed a flexible **command-line interface** that automates encryption/decryption workflows, enabling extensibility through object-oriented design for future ciphers such as RSA or Vigenère
- Implemented unit tests to validate encryption correctness and strengthen overall project reliability

Education

University of Waterloo

Sep. 2024 – Apr. 2029

Bachelor of Applied Science in Management Engineering (AI Option) - 88% Average

Waterloo, ON

Relevant Courses: Excel VBA, Programming (Python), Algorithms and Data Structures, Statistics, Linear Algebra, Calculus