

AMIRALI NAJAFIZADEH

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SUMMARY OF QUALIFICATIONS

- 2.5+ years of professional experience as a Software Developer, specializing in **Python** and **SQL** to build APIs and automated solutions in Agile environments.
- Proven expertise in **RESTful API integration**, particularly **Google APIs**, by developing a fully functional internal API that automated 20+ departmental tasks.
- Experienced in data visualization using tools such as **Power BI**, creating monthly vulnerability reports and annual cybersecurity campaign reports that supported data-driven decision-making.
- 3+ years of **SQL (MySQL)** and database management experience, including administering CCS department databases and designing data systems for a seasonal soccer league.
- Applied **machine learning techniques** (TF-IDF, MAP, R-precision) to build a search engine, demonstrating practical understanding of ML concepts and libraries.
- **Technical Skills:** Python, SQL, C++, Power BI, APIs, REST, HTTP, Bash, Git, Django.

EXPERIENCE

Software Engineer | Toronto Metropolitan University
Aug 2022 – Dec 2024

- **Built and designed** an internal API that increased the team's efficiency by at least 60%, automating tasks such as creating drive folders, sending emails, and managing spreadsheets.
- **Created** monthly vulnerability reports and an annual cybersecurity campaign report, leveraging Power BI to visualize data that highlighted challenges and guided the team toward effective solutions.
- **Developed** software to manage and resolve vulnerabilities for 250+ employees, integrating automated follow-ups until issues were remediated, significantly improving security response times.
- **Coordinated** the university's annual phishing campaign by creating 50+ templates and landing pages, achieving a record-high engagement rate with an 8% increase over the previous year.
- **Engineered** a follow-up notification system that sends weekly emails to vulnerable users, reducing the average active time of vulnerabilities by 6 days within the first month of deployment.

PROJECTS

Search Engine | Python, Machine Learning

- Developed a search engine with enhanced search capabilities by implementing various information retrieval and preprocessing techniques, including stop-words removal, term stemming, cosine similarity, and the top-k method
- Utilized TF-IDF formula to calculate the weights for each term in the query and the document and ranked the top K results based on their cosine similarity
- Enhanced the engine by expanding the query with synonyms for terms that surpass a weight threshold
- GitHub link to the project: [GitHub Repo](#)

Movie Recommender Application | Python, Machine Learning, HTML, CSS

- Implemented a user-based collaborative filtering (CF) algorithm to provide personalized movie recommendations
- Preprocessed and normalized data, calculated cosine similarity between the target user's ratings and other users' ratings and stored the scored similarities in a dictionary using a HashMap data structure

- Split the dataset into test and training sets, using matrix factorization filtering algorithm to calculate the accuracy of the system, 82%

EDUCATION

Toronto Metropolitan University

- Bachelor of Science in Computer Science with Distinction, 2024
- GPA: 3.7