

# Neil Varshney

Toronto, ON/Ottawa, ON | [neilvarshney@gmail.com](mailto:neilvarshney@gmail.com) | (437)-219-9216 | [neilvarshney.vercel.app](https://neilvarshney.vercel.app)  
[in/neil-varshney](#) | [github.com/neilvarshney](https://github.com/neilvarshney)

## Education

### Carleton University

Bachelor of Computer Science

Ottawa, ON

Sept 2023 – Present

- **Field:** Computer & Internet Security
- **CGPA:** 10.75/12 (A-)
- **Awards:** Dean's List (2x), Chalmers Jack MacKenzie Scholarship, Henry Marshall Tory Scholarship
- **Relevant Coursework:** Database Management Systems, Abstract Data Types & Algorithms, Applied Crypto & Authentication, Intro to Software Engineering, Fundamental Web Applications

## Technical Skills

**Languages:** Python, Java, C++, C, JavaScript/TypeScript

**Front-End Development:** React.js, Next.js, HTML5, CSS3, Tailwind CSS

**Back-End Development:** MongoDB, SQL, Node.js, FastAPI, Flask, RESTful APIs

**M.L & Tools:** PyTorch, Pandas, Git, GitHub, Linux, RESTful APIs

## Projects

### Fake News Detector || *ML, Python, JavaScript, React, SQLite, HTML/CSS*

 [Fake-News-Detector](#) 

- Engineered a fake news classifier using **Python**, **BERT embeddings**, and **logistic regression (scikit-learn)** to analyze text patterns, achieving **98.8%** accuracy and **99.0%** precision on **8,000+** held-out test articles
- Architected **RESTful API** with **JWT authentication** and **SQLite**, implementing secure user registration/login with password hashing and protected endpoints for news analysis requests
- Developed full stack application with **React.js** frontend and **Flask** backend, supporting concurrent user sessions, persistent history tracking, and real-time confidence score visualization for enhanced user engagement

### Anime Haven || *LLM, Python, JavaScript, React, FastAPI, SQLite, HTML/CSS*

 [Anime-Haven](#) 

- Developed a **full-stack** anime recommendation chat-bot using **React.js** frontend and **Python FastAPI** backend, serving personalized anime suggestions through natural language processing and AI integration
- Implemented real-time **conversational AI features** using React Hooks for state management and **GROQ inference engine** achieving **0.80-second** average response times
- Engineered a responsive user interface with real-time typing animations and markdown support, implementing secure user authentication and **SQLite** database integration for persistent chat history

### Password Manager || *Python, Flask, MongoDB, JWT, JavaScript CSS, HTML*

 [Password-Manager](#) 

- Developed a **full-stack** password management application using **Flask** and **MongoDB**, implementing **secure user authentication** with **JWT tokens** and bcrypt password hashing for enhanced security
- Engineered **server-side encryption** using the cryptography library with **PBKDF2 key derivation (100,000 iterations)**, ensuring passwords are encrypted at rest and decrypted with the master password
- Built a **responsive web interface with HTML/CSS/JavaScript**, implementing **RESTful API** endpoints for user registration, authentication, and password **CRUD operations** with proper error handling and validation

## Extracurricular Activities

**Carleton Computer Science Society:** Member

Sept 2023 – Present

**Intermurals Soccer:** Participant

Sept 2024 – Present