

# AREEJ NEGM



+1 (519) 501 2498



[areejnegm@gmail.com](mailto:areejnegm@gmail.com)



[Areej Negm](#)



[github.com/coldpeach2](https://github.com/coldpeach2)

## EDUCATION

University of Toronto (2023) — Honors BSc. Bioinformatics & Computational Biology Specialist, Minor in Computer Science

## SKILLS

- **Front End:** JavaScript, React.js, HTML/CSS
- **Back End:** Python, Java, REST-API, SQL, C, Node.js, GraphQL, Apollo Server
- **Frameworks:** Django, Flask, Spring Boot, Next.js, Express
- **Database:** PostgreSQL, SQLite, SQLAlchemy, MongoDB, DynamoDB
- **Project Tools:** Docker, git version control, SDLC, Shell/Bash scripting, Unix/Linux environment, Postman, GitHub
- **Theory:** Algorithm Design & Correctness, Data Structures, Software Design, Complexity/Runtime analysis, Optimization (Dynamic/Linear Programming, Greedy), Network Flow, P vs NP problems etc.

## PROJECTS & Experience

**Spring Boot Development Boot Camp** – [Udemy Certificate](#) – March 2023

- Model View Controller
- Beans and Dependency Injection
- Spring Security (Basic & JWT)

“TechTutor” Hackville 2023 (1<sup>st</sup> place Google Developer Student Challenge) – Feb 2023 [devpost.com/techtutor](https://devpost.com/techtutor)

- Co-developed a **full stack Python-Flask/React** web application - REST-API
- Voice assistant tutor to provide an accessible and personalized way for seniors to navigate technology
  - Built using **Flask** and **SQLAlchemy** for the backend and React.js for the frontend
  - Trained **Cohere's** generate API using sample user inputs for more tailored responses
  - Built a convolutional neural network using **PyTorch** and trained it for image classification
  - Features: User provided inputs such as age, comfort level with technologies (i.e., social media, hardware, banking) will return a response according to each profile.

“Toronto Fitness Club” **Software Development Project** – Sept 2022 – Dec 2022 [github.com/TFC-FullStackProject](https://github.com/TFC-FullStackProject)

- Co-developed a **full stack Python-Django/React** web application - REST-API
- Designed a comprehensive platform for users to navigate, sign up, subscribe, and create their own schedules from gym studios based in Toronto
  - Built using **Django** and **SQLite** for the backend and React.js for the frontend
  - Implemented custom Django user, admin, studio and class models, authenticated via tokens, API functionality tested with **Postman**, **axios** used for communication, **MaterialUI** for design
  - Features: locating closest studio based on geographical proximity, recurring payment plans etc.

“Banking ATM App” **Java Project** – Jan 2021 – March 2021

- Developed a Banking app within a team environment where users can access multiple accounts, withdraw, deposit or transfer money between accounts
- SOLID principles of class-design, Factory design pattern, MVC design pattern, Object Oriented Programming etc.

## PROFESSIONAL EXPERIENCE

**Mount Sinai** – Undergrad Research Term – May 2022 – Aug 2022

- Campbell Lab: Development of a Shiny web application prototype. Researched and performed database integration techniques to select for optimal implementation. Evaluated metrics based on runtime, memory usage, correctness and usability to integrate into the web app.

**SickKids** – Undergrad Research Term– Sept 2021 – April 2022

- Wong Lab: Assisted the lab in analyzing biological datasets obtained from fetal lung tissue samples to perform a number of pipelines to gather and interpret genetic processes during development.