Jonathan Amsalem

LinkedIn | GitHub | Email | Website

Profile:

Motivated Software Engineer and M.S student with a team player attitude, military experience, and a passion for innovative solutions. Skilled in Cloud Infrastructure, Web App Development, and Data Analytics.

Work Experience:

Backend Software Engineer - Friend2Meet

Remote

- Optimized various server-based algorithms through the manipulation of database sets. Aug. 2023 Present
- Developed and deployed various micro-services deployed on GCP.
- Designed and documented frameworks that were later implemented by myself and other team members.
- Generated custom analytic reports that track app metrics and user behavior used for business decisions.
- Created a load-testing workflow that optimized system performance, successfully reducing application request times to under 400 milliseconds.

Software Engineer Intern - NYU Langone

• Specialize in developing agentic applications for the use of internal NYU clients to design and implement customized tools that streamline various workflows.

NYC, New York Nov. 2024 - Present

Squad Commander (Staff Sergeant) - Combat Intelligence Brigade

Led and participated in covert operations.

Israeli Defence Forces

Operated advanced intelligence and communication systems.

Nov. 2017 - Aug. 2020

Projects:

Go-Coverage | Shell | GH Actions | February 2024

- Created a reusable open-source Github action that allows for Golang unit testing + coverage reports.
- Used by my current employer and has reduced approximately 30% of manual testing time.

Genomic Analysis Using Hamming Distance | Python | July 2024

Utilized Hamming distance to quantify genetic differences, enabling visualization of mutation patterns.

Breast Cancer Detection | Python | Scikit-learn | October 2024

- Compared the performance of four different ML models in detecting breast cancer
- Used methods such as recall and F1 for performance metrics and GridSearchCV for hyperparameter tuning.

Friend Location Tracking App | Python | React Native | GCP | November 2024

- Location tracking app that notifies friends based on proximity, allowing personalized alert radius and settings.
- Built with a React Native frontend, Python backend, and microservices for analyzing locations, sending alerts, and streaming real-time location data.

Watches Prediction Model | Python | Scikit-learn | September 2024

- Conducted EDA on smartwatch datasets using Pandas, Seaborn, and Matplotlib, cleaned data.
- and performed statistical analysis to identify key trends and correlations.
- Used Linear Regression and Decision Trees for modeling

Education

New York University - Masters of Science

• Area of Study: Biomedical Informatics

NYC,New York Class of 2025

Relevant skills: Machine Learning, Realtime Big Data Analytics, SQL Analytics

Jul. 2024 - Current

New Brunswick, NJ

Rutgers University - Bachelor of Arts and Science

• Area of Study: Cell Biology and Neuroscience

Jan. 2021 - May 2024

• Awards: Dean's List 2021-2024, Dean's Excellence Award.

GPA: 4.0

Remote

Rutgers University via Upright Education - Software Development Certificate

May - Aug 2023

• Relevant skills: Data structures, Javascript, React, MongoDB, Unit Testing

Skills:

- **Tech Skills:** Python, Javascript, Golang, React, SQL, MongoDB, Google Cloud, Kubernetes, Docker, Hadoop, Hive, Data Analytics (using Pandas, Seaborn, scikit-learn, etc).
- **Soft Skills:** Team management, Goal-Oriented Planning, Organization.