ROHAN SUNILKUMAR NAIR

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EDUCATION

UNIVERSITY OF TORONTO   Toronto, ON
Honors Bachelor of Science + PEY Co-op Program   2022 - Expected May 2027
Major in Computer Science; Minors in Mathematics and Statistics
Coursework: Data Structures, Software Design, Information Security, Operating Systems, Database, Machine Learning

PORTFOLIO PROJECTS

QucikGather | *RestAPI, Flask-Python, React,-Bootstrap PostgreSQL, AWS S3/RDS. Heroku*   July 2024
- Github Link | https://quickgather-5069dcada862.herokuapp.com/
  A unique social media app specifically designed to simplify event planning with friends and family.
  - Responsible for developing the Full Stack Application with Flask/React Components/PostgreSQL/ SQLAlchemy
  - Implemented login auth using JWT auth and email verification during signup using a flask wrapper of the SMTP Lib.
  - Implemented a SocketIO setup for user real time group chat feature.
  - Untlizied a Virtual Object Storage (S3) for storing and retrieving users' profile picture storage.
  - Created the DB schema though ORMs (SQLAlchemy) and set up RDS connection through Heroku.

Weedout | *Python, Flask, Nginx/Gunicorn, Bootstrap, AWS EC2, BDD/TDD, CI/CD, Docker*   Aug 2024
- Github Link | www.weedout.tech **An open-source Python package designed to automate data preprocessing.**
  - Developed and refined key preprocessing /statistical functions using Pandas, Scikit-Learn, NumPy and SciPy.
  - Set up a CI/CD pipeline with GitHub Actions for automating testing (unnitest) and deployment to PyPI
  - Developed the Weedout website, contains a GUI of the pipeline to interact with.
  - Containerized the website using Docker and deployed to both an EC2 production environment and Heroku.
  - Conducted BDD testing to ensure the website's functionality with tools like Behave and BS4

GUI Adventure Games | *JavaFx, GitLab, SOLID Principles, Agile, Design Patterns*   Dec 2023
- In our CSC207 class, three other members and I developed **a GUI-based game using JavaFX as our final project**.
  - Incorporated modern software design patterns like the Facade pattern.
  - . Employed tools like GitLab for version control and embracred agile methodologies like Scrum to enhance collaboration.

WORK EXPERIENCE

UTM Software Hub
Projects Director   Aug 2024 - Current
- **Founding member** of the UTM software hub. **Responsible for hiring** team leads and associates. **Responsible for hosting weekly scrum meetings** with the team leads of the 4 projects. **Leading the development** of **Weedout 2.0**, a iteration of my previous project, focusing on implementing **data visualization /anaytics** and enhancing **runtime efficiency** by 80%.

Enactus
Data Science Associate   Sept 2023 – May 2024
- As part of a team developing a real-time computer vision application, **I created a 2D CNN prototype** using ImageNet and TensorFlow. I was also **responsible for preprocessing images**, including normalization, resizing, and augmentation, which enhanced **model efficiency** by 50%. Enhanced **runtime efficiency** by deploying the model on Azure cloud infrastructure.

TECH STACK

Languages: Python, JavaScript, Java, C, Assembly   **Frameworks/ Libraries**: Flask, React, Bootstrap, Pandas, Sklearn
Database: MySQL, PostgreSQL, SQLAlchemy **Tools:** AWS, Heroku, Git, Docker

EXTRACURRICULAR / ACHEIVMENTS

Intel Student Trainee : Dveloped a patented Computer Vision Complaint bot with Intel for rural language text recognition.
TEDx Speaker: Gave a talk on importance of Non-traditional careers, **Sports enthusiast**, Collector of **Pokemon cards**.