ROHAN 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 - GPA: 3.46/4

WORK EXPERIENCE

INTEL CORPORATION Bangalore, KA
Artificial Intelligence Student Trainee Jan 2019 – Jun 2022

- Part of the team that was responsible for a pioneering National Education Program in India. Helped the CBSE board and Intel to design and implement AI as a course of study for school students in the nation. I gained an understanding of key concepts, including Object Detection, Image Processing, and Pattern Recognition. My learning journey involved hands-on engagement with tools such as OpenCV and Google Vision, which allowed me to delve deep into the practical aspects.
- The project my partner and I worked on after 8 months of training was centred around the development of an AI-driven Complaint bot designed to read and understand hand-written text written in various rural languages using Computer Vision. Our project, developed in collaboration with Intel, was presented at numerous international and national conferences. In 2022, it was granted a patent in partnership with Intel.

EXTERNAL PROJECTS

Weedout Package | *Pandas, SkLearn, CI/CD, TDD (Nosetests)* Jul 2024

- **Team Project:** Weedout is an open-source Python package that streamlines data preparation for CSV datasets. It automates encoding, imputation, feature engineering, and data cleaning based on your dataset type and intended model. Weedout's goal is to simplify preprocessing, allowing ML developers to focus on model building. I was responsible for: • Developing and refining key functions using Pandas, Scikit-Learn, and SciPy. • Implementing unit tests with TDD using nose and coverage. • Setting up CI/CD pipeline with GitHub Actions for automated testing and deployment to PyPI.

Weedout Website | *Flask-Python, Nginx/Gunicorn Bootstrap, HTML/CSS, AWS EC2, BDD (Behave)* Aug 2024

- **Solo Project:** The Weedout website provides a GUI for the Weedout package's preprocessing pipeline. Users answer brief questions about their preprocessing needs and upload their dataset. The site then processes the data and returns a zip file with the preprocessed CSV, along with a summary of applied techniques and functions. I was responsible for: • Developing the frontend and backend. • Migrating the server to a production environment and deploying it • BDD Testing.

Palchecker | *JavaScript, Pandas, MatPlotLib, SeaBorn* Jun 2024

- **Team Project:** Led the development of Palchecker, a tool for rating and tracking daily experiences with reflective questions powered by a Hybrid AI model. Built during a three-day hackathon, • I handled data preprocessing, data visualization, and the building of the Hybrid AI model (Random Forest Regression and Few Shot CoT with LLama 2). • I designed and implemented an IndexedDB using JavaScript to support backend functionality, enabling updates to the check-in calendar.

QucikGather | *RestAPI, Flask-Python, React,-Bootstrap PostgreSQL, ORMs, AWS S3* Aug 2024

- **Solo Project:** QuickGather is a social media app designed to simplify event planning with friends. Users can join/create a group by entering their mood, availability, budget, and preferred travel distance. The app then generates group 'stats,' providing individual and collective insights to help everyone find common ground and plan events more efficiently. I was responsible for •. Creating a full stack app with Flask/React/PostgreSQL • Login auth using JWT • SocketIO setup for user chat feature • Virtual Container (S3) setup for profile pictures • Creating DB schema though ORMs (SQLAlchemy) • Email Verification during signup using SMTP Lib.

TECH STACK AND EXTERNAL SKILLS

Languages: Python, JavaScript, Java, C, Assembly
Technologies/Frameworks/ Libraries: Flask, React, HTML, CSS, Bootstrap
Database: MySQL, PostgreSQL
External Skills: TEDx Speaker