Ninaad Kalla

E: ninaadkalla@gmail.com T: 514 999-3433

Skills

PROGRAMMING Python, SQL, Github, JavaScript

MACHINE LEARNING Scikit-learn, Tensorflow, Keras, ML Flow BIOCHEMISTRY LIMS, CFX Maestro, BLAST, PyMol

DATA ANALYTICS Pandas, Numpy, Scipy, Statsmodels, Matplotlib, Seaborn, Tableau LANGUAGES English, French, Hindi, Urdu

CLOUD & PRODUCTIVITY

Google Cloud Platform, MongoDB, BigQuery, Google Suite, Microsoft 365, Heroku

Professional Experience

Jun 2023 - Present DATA SCIENTIST, VeracityBio Engineered a Python-based machine intelligence platform using Pandas, NumPy, Scikitlearn, and Streamlit for automatic data collection, visualization, and analysis. Aimed to help researchers verify the validity of academic claims. Experimented in clustering and classifying biomedical research papers in citation networks ranging from 1,000 - 10,000 papers. Used a combination of TF-IDF, PCA, t-SNE, and K-means methodologies. Employed modern JavaScript visualization libraries Sigma.js and Graphology to generate interactive network graphs to track the evolution of scientific ideas. Sept 2019 – Aug 2022 **RESEARCH ASSISTANT**, Galenvs Sciences Developed and implemented a Google Apps Script-based scientific laboratory notebook, improving work processes and collaboration within the lab. Liaised between the data science team and lab scientists, managing data flow, requirements, and analysis, and contributing to automated data analysis pipelines. Designed and optimized protocols for liquid-handling experiments using the Hamilton STAR, a cutting-edge robot, ensuring reproducible and precise data. Synthesized, optimized, and validated magnetic nanoparticle-based nucleic acid extraction kits improving sample quality and throughput. May 2018 – Aug 2018 DATA SCIENTIST, ERA Environmental Management Solutions Designed the user interface of proprietary software for streamlined data entry, adhering to Canadian federal guidelines on environmental standards and simplifying compliance tasks for client companies. Collaborated with software developers to develop standardized data entry protocols, ensuring accurate data entry, and improving consistency across datasets. Dec 2017 - Mar 2018 ASSISTANT LABORATORY TECHNICIAN, Marianopolis College Collaborated with senior faculty in supporting lab operations, gained hands-on experience in equipment handling, prepared lab material for students, and ensured safety and organization during labs.

Education

BIOINFORMATICS, Master of Science (BSc) Université de Montréal, Montréal, Canada		
DATA SCIENCE BOOTCAMP, Le Wagon		
24-week part-time intensive coding bootcamp focused on mastering data science using Python.		
Acquired skills in machine learning and deep learning through hands-on learning with Scikit-learn, TensorFlow, and Keras, focusing on a blend of theory and practical projects.		
Designed, built, and deployed robust data products, incorporating ML Ops practices and tools such as Google Cloud Platform, ML Flow, Heroku, and Streamlit.		
HONOURS BIOCHEMISTRY (CO-OP), Bachelor of Science (BSc) Concordia University, Montréal, Canada		
PURE AND APPLIED SCIENCE , Collegial Studies Diploma (DEC) Marianopolis College, Montreal, Canada		

Projects

May 2023 – Jun 2023 PILL PIC

A deep learning app to identify medication by taking a picture.

Utilizes Ultralytics YOLOv8 for pill detection and Google's Inception-v3 for accurate pill identification.

Trained on over 80,000 unique images of pills with a final validation accuracy of 98.41%.

Returns relevant information to the user regarding the pill such as: dosage, side effects, and precautions.

May 2021 – Dec 2021 BSC. HONOURS THESIS

Microwave Reactor-Based Synthesis of Metal–Organic Frameworks for the Capture and Purification of Humic Acids from Environmental Soil Samples

Certificates

Supervised Machine Learning:	Unsupervised Learning, Recommenders,	Advanced Learning
Regression and Classification	Reinforcement Learning	Algorithms
DeepLearning.AI, Stanford	DeepLearning.AI, Stanford	DeepLearning.AI, Stanford
University	University	University