

Kunal Sachdev

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SUMMARY OF QUALIFICATIONS

- Excellent time management, work ethic, multi-tasking skills developed by simultaneously completing extracurricular activities & securing high grades
- Adopted self-starter/getting-things-done growth mentality by completing out-of-syllabus courses & projects
- Enthusiastic about using data science to solve real-world/practical business problems
- **Languages:** Python, R, C, SQL (IBM Db2, MySQL, Oracle SQL Developer), HTML/CSS, Racket
- **Frameworks/Developer Tools:** Jupyter Notebook, Flask, Git, GitHub, PyCharm
- **Text Editors/Debuggers:** Linux CLI, Vim & scripting (ongoing CS 136L), Emacs, GDB, Valgrind, Notepad++
- **Libraries:** Pandas, NumPy, SciPy, Scikit-learn, YFinance, Plotly, Dash, Matplotlib, Seaborn, Folium, Js, SQLAlchemy, Openpyxl, Cx_Oracle, ibm_db, sqlite3, bs4, requests, csv

EXPERIENCE

Information Technology Intern

Apr – Jun 2022

HDFC ERGO General Insurance (P&C Insurance)

Mumbai, India

- Created API to accept client file and automate below-mentioned tasks using Flask
- Validated use of original premium quote excel file, read and segregated data basis insurance products, and stored the data in respective Oracle Database tables for further use by company using sqlalchemy, numpy, and pandas.
- Eliminated manual data entry errors & reduced policy generation time from 1.5 hours to 2 minutes

PROJECTS

Winning the Space Race with Data Science | Jupyter Notebook, Python

Oct 2022

IBM, Coursera

- Created machine learning pipelines/models to predict if the Tesla's Falcon 9 rocket's first stage will land successfully.
- Data Collection - SpaceX API & web-scraping from Wikipedia. EDA - Db2 and SQL magic
- Launch Site Proximity Analysis - Folium and Matplotlib.
- SpaceX Launch Records Interactive Web Dashboard – Plotly. Built Logistic Regression, KNN, SVC, Decision Tree models and evaluated the best model.
- The Decision Tree model can be used if an alternate company wants to bid against SpaceX for a rocket launch

NBA Free Throw Prediction | Jupyter Notebook, Python

May – Aug 2022

Guided Research (Polygence Scholar Page)

- Constructed, evaluated, and compared two linear regression models predicting NBA players' free throw shooting percentage using scikit-learn, statsmodels.api, and SciPy
- Conducted exploratory data analysis (EDA) for NBA player statistics using NumPy, Pandas, Seaborn, Matplotlib
- The predicted free throw accuracies are used for tailoring personal training programs & developing end-game strategies.

EDUCATION

University of Waterloo

ON, Canada

Term 1A – 84%, Candidate for Bachelor of Computer Science

Sept 2023 – Present

- Recipient of Faculty of Mathematics International Excellence Award – India
- Recipient of University of Waterloo President's Scholarship of Distinction

Courses (Coursera)

- IBM Data Science Professional Certificate (Applied Data Science Capstone, Machine Learning with Python, Data Analysis with Python, Data Visualization with Python, Databases & SQL for Data Science with Python)
- Duke Introductory C Programming Specialization - Writing, Running & Fixing Code in C
- UMichigan Web Design for Everybody Specialization - Introduction to HTML5, Introduction to CSS3 (ongoing)

HONORS & AWARDS

Euclid Math Contest – Distinction (2022)

AP Scholar Award (2022)

Hong Kong Intl. Math Olympiad – Gold (2022)

Asia International Math Olympiad – Silver (2022)

Singapore Intl. Math Olympiad Challenge – Bronze (2022)

Singapore/Asian Schools Math Olympiad – Bronze (2022)