Arjunvir Sidhu

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TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, SQL, Java, C#, R
Frameworks and Libraries: React.js, Pandas, NumPy, JUnit, jQuery/AJAX
Tools: Git, RESTful APIs, Linux/UNIX, AWS, SQL Server Management Studio, Informatica Developer (IDQ), DevOps

EDUCATION

Bachelor of Computing (Honours), Computer Science (Co-op)   Sep. 2021 – Apr. 2025
University of Guelph   *Guelph, ON*
- Awarded an entrance scholarship of $3000 and member of the Chess club

Data Analytics Professional Certificate   May. 2023 – Oct. 2023
Google   *Coursera*
- Improved critical and analytical thinking using tools such as R, Tableau, and relational databases
- Demonstrated hands-on experience with data cleaning, data visualization, project management, interpreting and communicating analytical findings

WORK EXPERIENCE

Junior Technical Analyst (Co-op)   Sept 2023 - Dec 2023
Ministry of Transportation Ontario (MTO)   *Toronto, ON*
- Creating a Full-Stack Application designed to simplify the Business Analysis process by converting plain **text into SQL queries & automating data visualizations** with a goal of **boosting user base by 200%**, resulting in the replacement of IBM Cognos Analytics
- Created the Query Generator & Metadata structure for the Text-To-SQL application using SQL stored procedures, scalar-value & table-value functions
- Performed **ETL operations** such as **Data Profiling, Transformation** (Mapping & Expression writing) using Informatica Developer with the Data Quality & Reporting team for Vehicle and Financial data

Screener & Data Entry   May 2020 - April 2023
Schlegel Villages   *Mississauga, ON*
- Implemented an automated data entry program, resulting in **85% reduction in downtime** previously dedicated to manual data entry
- Interacted with a database on a daily basis to keep client's screening and testing information/visitation history and provided continuous user-experience improvement suggestions to developers

PROJECTS

Automated Investment Portfolio | Python, Pandas, NumPy, C#, NinjaScript (2023)
- Created a portfolio of 5 automated futures trading strategies with low correlation **returning ≈ 10% monthly**
- Conducted Monte-Carlo, walk-forward & correlation analyses, including slippage & commissions in the back-testing for each strategy

Option Pricer | Python, NumPy, SciPy (2023)   github.com/rjnvr/option-pricer
- Implemented the Black-Scholes model to accurately determine option prices using NumPy and SciPy (norm)
- Incorporated key variables such as underlying asset price, strike price, time to expiration, volatility, and risk-free interest rate, resulting in highly accurate and reliable pricing predictions

Molecule Visualizer Database | Python, C, SQLite, JavaScript, jQuery, AJAX, HTML/CSS (2023)
- Created a full-stack app that lets users upload .cif files, parsing them into SVG format for display. Integrated SQL database for storing and retrieving molecule data
- Leveraged Python web server hosting, coupled with jQuery and AJAX, to ensure smooth functionality and interactive components within the application

Portfolio Website | JavaScript, React.js, HTML/CSS (2023)   github.com/rjnvr/portfolio-website
- Developed a responsive portfolio website, implemented EmailJS API to build an interactive contact form on the web page for convenient contacting
- Leveraged React Hooks and event listeners to create dynamic user experiences, ensuring reliable performance by hosting the website on Hostinger