

MUHAMMAD HAIDER SAEED

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Status: Post-Study Work Visa

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CAREER OBJECTIVE

As an enthusiastic Data Scientist, I am passionate about leveraging data-driven insights to solve complex problems and make informed decisions. With a solid foundation in programming, data visualization, and statistical analysis, I aim to contribute to innovative solutions that drive organizational success and sustainability.

I thrive in collaborative environments that encourage diverse perspectives and foster continuous learning. My goal is to enhance my skills in machine learning and advanced analytics which would then enable me to tackle real-world challenges and generate meaningful value from data. I am committed to using my expertise to create impactful contributions in the dynamic and rapidly evolving field of data science.

SKILLS & PROJECTS

Python Programming and Applications

FinTrack – ANZ Bank Statements Analysis Tool (Software Development | Data Analytics)

Aug 2023

- Crafted a user-friendly software that facilitates the effortless drag-and-drop import of bank statements. Leveraged the power of Pandas and SQL to empower users with advanced data querying, while Matplotlib transforms data into meaningful visuals. This user-centric approach yielded an impressive 80% enhancement in financial planning efficiency, offering streamlined analysis and empowering better financial management.

Beer Recommender (Data Analytics | Cloud Computing)

Jun 2023

- Developed an intelligent beer recommender system using Apache Spark, providing personalized beer recommendations to users. Performed extensive research on prominent algorithms to optimize the system's recommendation accuracy and performance. This was followed by execution of SQL queries to ensure precise outcomes and enhance the reliability of the recommendation engine. I also leveraged Google's cloud computing to assess the software's effectiveness and speed thus enabling scalability and direct processing of extensive datasets.

RIPv2 Protocol (Network Protocols)

Jun 2022

- Created a network based on the RIPv2 protocol and conducted testing of static routing functionality. Developed a comprehensive configuration file and facilitated efficient exchange of routing packets by computing routes based on periodic updates. Also implemented split horizon with poisoned reverse to effectively prevent routing failures and loops thus ensuring optimal network performance and stability. Program executes in Linux using bash.

Language Compiler (Compiler Design)

May 2022

- Designed a language compiler from scratch for a small programming language, encompassing a scanner, parser, and code generator. Tested the compiler by crafting custom programs to ensure error-free functionality.

Socket Programming (Computer Networks)

Aug 2021

- Implemented a socket program that facilitates bidirectional communication between a client and a server, enabling the exchange of data packets. The program utilizes Python's socket library to establish connections, transmit data, and receive responses seamlessly.

Programming Expertise: Java, C, and C++

Optical Illusion Art Gallery (Computer Graphics) –

May 2023

- Developed optical illusions and 3D objects along with realistic physics animations in OpenGL using C++ and Microsoft Visual Studio, showcasing proficiency in graphical programming and development tools.

Ray-Traced Scene (Computer Graphics)

April 2023

- Created a complex graphical scene by implementing 3D object modelling and incorporating ray tracing concepts. This required an in-depth knowledge of mathematical equations for modelling and a keen understanding of lighting physics to achieve realistic visual effects.

Monster Fighter Game (SWE)

May 2022

- Demonstrated leadership by spearheading a software engineering project, coding, testing, and thoroughly documenting a monster fighting game using Java.
- Added extra functionalities such as game sounds, navigation bar and real time data monitoring.

Memory Game (Embedded Systems)

Sept 2021

- Led a project focused on programming and testing a memory game on an AVR microcontroller - ATmega32 microchip in C. The game requires users to memorize LED patterns before they turn off. Gained valuable experience in embedded system programming.
- Proficiently designed structured C programs and adeptly applied Boolean algebra principles for efficient problem-solving.

Full-Stack Development: HTML, CSS, JavaScript, SQL, PHP, Flutter/Dart

Tasbeeh Keeper App (Mobile Application Development)

Jul 2024

- Developed a mobile application using Dart with Flutter, focusing on user-friendly design and smooth animations.
- Incorporated Firebase authentication to secure user accounts and saved user progress.
- Enabled personalized user experiences with options to input custom text for tasks and track progress dynamically.
- Leveraged responsive design principles to ensure scalability and usability across devices of various sizes.
- Published the app for testing, prioritizing functionality and design, with plans for further community engagement and scaling.

Portfolio Website (Web Development)

Jul 2023

- Created a fully responsive portfolio website, showcasing my interest in UI/UX and an eye for design.
- Consists of frontend development which deals with the user interface and capturing the user's contact information while the backend sends data for processing and storing it in Google Sheets.

Student Timetable Portal Website (Web Development)

May 2021

- Completed a collaborative group project focused on designing and testing a fully functional student portal system.
- Proficiently queried, populated, updated, and managed databases in MySQL, ensuring seamless data operations. Designed conceptual, logical, and physical database schemas to optimize data organization.
- Demonstrated a good understanding of relational database management systems and their integral role in software applications. Also used GitHub as a version control for collaboration and code management

EDUCATION

The University of Canterbury | Bachelor of Science (Computer Science)

Feb 2020 – Jul 2023

- Final Year GPA – 6.0
- Activities: Acted as Class Rep for three different course subjects.
- Engaged actively in COMPSOC (Computer Science Society), participated in various events, and gained networking opportunities to enhance knowledge and build valuable connections within the field.

Lahore Grammar School | GCE O & A Levels

Jan 2017 – Dec 2020

- Class Representative: Represented the class and facilitated communication.
- Inter-school Competition: Won multiple events, including a science competition.
- Sports Enthusiast: Actively participated in basketball, football, cricket, and swimming.
- Community Involvement: Hosted a JTEC event for disabled community members.

SAT Score: 1300 (Math – 710/800, English – 590/800)

Languages: English (First Language), Urdu

WORK EXPERIENCE

Asset Analyst

Dec 2023 - Current

Horizon Energy | Whakatane, New Zealand

- Developed Data Quality Dashboards using FME, Power BI, and Python to monitor asset data quality. Implemented automated processes to ensure accuracy, consistency, completeness, and timeliness of asset data, significantly enhancing organizational decision-making.
- Spearheaded automation for regulatory reporting (Schedule 9 & 12) using FME, reducing manual efforts and improving productivity by 20%. Delivered on-demand analysis tools for asset condition and health reporting.
- Led the overhaul of GIS NAV Dashboards, integrating NAV data, GTechnology, and SharePoint, streamlining job progress tracking with intuitive visualizations. Implemented live status links and enhanced usability through Power BI.
- Created Python-based custom transformers for FME to optimize data processing workflows, contributing to the FME Hub community with over 500 downloads.
- Designed automated backup systems for critical data layers (AGOL and others), safeguarding against data loss.
- Authored SQL scripts to clean and update Oracle database records, resolving data anomalies and maintaining schema compliance.
- Implemented Fieldreach Work Order Generation for field inspections, utilizing Smart Excel for efficient work order configuration.
- Automated KPI exemption reporting through Power Automate, streamlining communication and reducing manual interventions.
- Designed Zone Substation Exception Report Dashboards in Power BI, performing sentiment analysis on asset condition data to flag critical issues and assign remediation tasks.
- Updated GIS processing guides to reflect current workflows and technologies, ensuring consistency and clarity for future users.

Customer Service | Delivery

Part-Time

Dominos Halswell | Christchurch, New Zealand

- Improved ability to assist customers in making informed decisions.
- Provided exceptional service which lead to customer satisfaction and in turn increased brand loyalty.
- Effectively managed delivery schedules and coordinated phone calls by prioritizing tasks and practicing strong time management skills.

Retail | Stock Clerk

Part-Time

Pak N Save Hornby | Christchurch, New Zealand

- Gained expertise in delivering excellent customer service and maintaining exemplary workplace etiquette.
- Strengthened interpersonal skills through communication with co-workers.
- Organized and restocked shelves to maintain a well-presented and efficiently managed store layout.

REFERENCES

(Available on request)