

Zohair Omar

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Role-Specific Portfolio: zohairomar.netlify.app/for/precision-drilling/infrastructure-services-intern

Summary

4th Year Computer Science & Mathematics student @ UofC (transferred from UBC) with hands-on experience building reliable analytics and automation systems for **oil & gas-style operational data** using **Python, SQL, and cloud-based workflows**. Strong interest in **ML/AI optimization** and applying it to real infrastructure and operational problems; built forecasting, anomaly detection, and automation solutions while maintaining stability through testing, documentation, and change discipline. Coursework exposure includes **computer organization/OS fundamentals and networking protocols** (TCP/IP, DNS, DHCP) and practical scripting with **PowerShell** for automation and system tasks.

Technical Skills

Cloud & Microsoft: Microsoft Azure, Microsoft Entra/AD concepts, Intune exposure, SharePoint, Microsoft Graph API

Scripting & Automation: PowerShell, Python, JavaScript, GitHub Actions (CI/CD)

Infra & Networking: Windows fundamentals, patching concepts, endpoint lifecycle concepts, TCP/IP, DNS, DHCP, SMTP

Data & ML: Python (Pandas, NumPy), SQL, forecasting, anomaly detection, ETL/EDA, Power BI (Power Query, DAX)

Education

Bachelor of Science, Computer Science & Mathematics (Minor in Economics) Expected April 2027
University of Calgary, Alberta

Bachelor of Science, Computer Science Sep 2022 – Sep 2024
University of British Columbia, Vancouver

Relevant Courses: Computer Organization / Computing Machinery, Systems & Networking fundamentals, Applied Machine Learning (CPSC 330), Explorations in AI & ML (CPSC 383)

Projects

Production Analytics & Forecasting Dashboard; Python, Streamlit, Pandas, Azure AD (OAuth2), Microsoft Graph API, SharePoint, Power Automate

- Built an end-to-end pipeline that cleans and standardizes multi-well production data (2008–2016) into an **analysis-ready dataset** for reporting and downstream modeling.
- Implemented **forecasting + anomaly detection** (ETS + rolling z-score flags) and KPI tracking to support optimization-style questions (trend shifts, deviations, and performance changes).
- Integrated secure cloud data access using **OAuth2 + API-based SharePoint I/O** and automated scheduled reporting via **Power Automate**, emphasizing stability and repeatability.

Oil & Gas Asset Integrity Dashboard; Power BI, SQL Server, Power Query, DAX

- Designed a clean **data model and reporting tables** for **24 months** of operational integrity/compliance data to improve accessibility and usability of metrics.
- Built drill-down dashboards and documented KPI definitions/mapping logic to keep reporting consistent across stakeholders and reduce interpretation errors.

Experience

TechNova Feb 2025 – Present
Co-Founder & VP Technical; PowerShell, Python, SQL, Git Calgary, AB

- Automated repetitive operational tasks using **PowerShell** and lightweight scripts; improved consistency of setup/maintenance steps while reducing manual effort.
- Built data-backed functionality using **Python and SQL**; validated outputs with structured checks to ensure reliable behavior under changing requirements.
- Created runbooks and onboarding documentation to support stable handoffs and reduce repeat support requests across internal users.

Agrius IT May 2024 – Jul 2024
Software Developer Intern; Python, SQL, HTML/CSS, JavaScript Abu Dhabi, UAE

- Supported troubleshooting by writing/refining **SQL queries** to retrieve and validate operational data; summarized findings to accelerate incident resolution.
- Strengthened stability by improving error handling and documenting repeatable resolution steps (SOPs/runbooks) with attention to change discipline.

Enactus UCalgary – WealthPath Jul 2025 – Present
Front-End Development Lead; GitHub Actions, Agile/Scrum Calgary, AB

- Led a 4-person team delivering iterative releases; tracked issues/action items and collaborated cross-functionally to meet deadlines.
- Implemented **CI/CD checks** with GitHub Actions to standardize build/test validation and reduce regressions, improving release reliability.