

# WALID AL-HALLAK

## Skills

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- SQL (Microsoft SQL Server, MySQL, BigQuery)
- Python (Pandas, NumPy, SciPy, Matplotlib, RegEx, Object-Oriented Programming)
- Object-Oriented Programming, Data Structures and Algorithms
- Documentation and Reporting
- Excel (XLookup, Conditional Formatting, Pivot Tables, Dashboards)
- Microsoft Power BI (Data Cleaning, Power Query, DAX, Reporting)

## Projects

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### EMERGENCY RESPONDERS SMART MONITORING SYSTEM – Summative Learning Project Ongoing

- Researched about the topic to **identify problems** and propose solutions to be implemented.
- Gathered data from emergency responders to **identify key pain points** and act upon them.
- Developed a **preliminary design** for a novel engineering **prototype**.

### CS:GO MATCHES ANALYSIS – Personal Project January 2024

- Utilized **Power BI** to transform over 1,200,000 rows of data spanning 100 minutes of CS:GO data.
- Used **DAX** to create new measures that allowed me to find trends in the data.
- Created an interactive **2-page report** to showcase the insights gathered from the data.

### FIREFIGHTERS FATALITIES IN THE USA FROM 1990 TO 2021 – Personal Project November 2023

- **Exported, cleaned, and processed** public data to extract pertinent information using **Excel**.
- Analyzed data comprehensively to identify **trends and patterns** for potential interventions.
- Developed a customized **dashboard** to visually represent complex data in a clear and concise manner.

### SENTIMENT ANALYSIS ON ARABIC TWEETS – Personal Project May 2023

- Conducted an analysis of 70768 Arabic tweets with diverse classifications using **Python**.
- Utilized **regular expressions** strategically to efficiently remove extraneous elements and enforce **normalization** rules.
- Interacted with **Twitter's API** to retrieve a diverse dataset of Arabic tweets for training and testing purposes.
- Implemented **Natural Language Processing** techniques to train a classification model that reached **80% accuracy**.
- Aggregated and visualized the data by using **pandas** to compile a professional report.

## Work Experience

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### SOFTWARE DEVELOPMENT INTERNSHIP – SAUGO 360 June 2023 - August 2023

- Worked with **Ruby** to create a web application with an **MVC design pattern** that served multiple purposes.
- Leveraged **Prompt Engineering** to achieve desired outputs.

### VOLUNTEER – Lebanese Red Cross June 2022 - Present

- Collaborated seamlessly with a **diverse team** of healthcare professionals to ensure efficient and effective emergency response.
- Managed the timely restocking of medical supplies, **minimizing downtime** during critical situations.

## Education

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### BACHELOR OF ENGINEERING – Rafik Hariri University – Mechref, Lebanon September 2020 – May 2024

Major: Computer and Communications Engineering – CGPA: 3.85

## Other

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- **Languages:** Arabic (Native), English (Fluent), French (Fluent)
- **Certifications:** Google Data Analytics Program, Google Advanced Data Analytics Program (4 out of 8 courses)