Mohammed Abdul-Nabi

Email | LinkedIn | Github | Portfolio

EDUCATION

Honours Specialization in Computer Science

University of Western Ontario

London, ON Canada

Sept 2023 - May 2026

• Relevent Coursework: Data Structures, Analysis of Algorithms, Time Complexity, Database Management, Operating Systems, Objected Oriented Programming, Version Control, Software Design, Aigle Development, Computer Architecture.

Honours Specialization in Finance, Minor in Economics

Windsor, ON Canada

University of Windsor, Odettee School of Business

2018-2022

• Relevent Coursework: Quantitative Modeling, Financial Management, Risk Management, Data Analysis, Option Pricing, Portfolio Management, Equity Market, M&A, LBO, Forecasting, Valuations Models, Statistical Methods, Game Theory.

TECHNICAL SKILLS

Languages: C, C++, Python, Java, Typescript, HTML, CSS, ARM Assembly, Bash, R, SQL, PHP

Frameworks: Pandas, NumPy, PyTorch, React, Node.js, JavaSwift, Matplotlib, MQTT, Websockets, MySQL, Ardunio Developer Tools: Git, Gitlab, Unix/Linux, Agile, Jira, Visual Studio, Clion, Pycharm, IntelliJ, Docker, Heroku, Twilio

EXPERIENCE

WFR - Western Formula Racing

London, ON

Dashboard Engineer | Student Open-wheel Racing Team

08/23-Present

- Designed & built embedded dashboard solution for an electric race car, displaying real-time data from CAN bus network.
- Evaluated & integrated hardware components, including CAN transceivers, micro-controller, and display, optimizing for performance in various conditions, compatibility with existing hardware, space limitations and budget constraints.
- Developed multiple operational modes for testing, troubleshooting, performance analysis & setup optimization.
- Created a dashboard interface, delivering real-time telemetry and performance data to the driver in a fast-pace environment.

Can-Ango Trading

Luanda, Angola

 $Jr.\ Financial\ Analyst\ |\ { t Car}\ { t Dealership}\ \&\ { t Service}\ { t Garage}$

- 06/22 08/23
- Analyzed monthly financial statements to identify trends & variances, leading to a 10% increase in profitability.
- Conducted market & competitive analysis to support decision-making, contributing to a 8% increase in market share.
- $\bullet \ \ \text{Automated data collection \& financial reporting processes using Python \& Excel, reducing report preparation time by 40\%.}$
- Assisted in the preparation of annual budgets & quarterly forecasts, enhancing financial planning accuracy and efficiency.

Honeyspot Miami, FL

Budget Analyst Intern | Start Up

05/21 - 08/21

- Leveraged Excel & financial tools to streamline budget reporting, decreasing preparation time by 30%, enhancing efficiency.
- $\bullet \ \ {\rm Assisted \ in \ generating \ comprehensive \ financial \ forecasts, improving \ the \ precision \ of \ revenue \ \& \ expenditure \ estimates.}$
- Contributed to the creation & tracking of budgets, leading to a 15% cut in operational costs through improved financial planning & resource allocation.

Projects

WFR - Driver in the Loop Simulator \mid In-progress

- Developing a high-fidelity Driver-in-the-Loop (DIL) simulator, leveraging Assetto Corsa to replicate real-time car dynamics, providing drivers with a virtual testing environment for driver training and car setup optimization.
- Translate real-world car physics into the simulation environment, fine-tuning parameters such as suspension & aerodynamics to closely replicate the cars dynamics, with the goal of enhancing lap time and providing insights to the driver.
- Replicate real-world race tracks in the simulation environment, accurately modeling track layouts, elevations, and surface conditions to provide drivers with realistic practice scenarios and improve driver preparation.

Virtual Pet Care Game | In-progress

- Developing and implementing a virtual pet care simulation application in Java, incorporating key game-play mechanics such as health, happiness, and hunger management to enhance user engagement.
- Collaborating within a team to apply and utilize software engineering principles, UML diagrams, Javadoc documentation, Jira for project management and GitLab-based version control, ensuring adherence to project specifications and timelines.
- Designing and integrating an intuitive Graphical User Interface (GUI) using JavaSwing, ensuring seamless navigation across multiple interactive screens, including game-play and tutorial modules, and pet animations all to increase user immersion.

IoT Notifications and SMS

- Developed an IoT system that automates notifications at specified times using data retrieved from an open source API.
- Implemented a real-time display to show the time for the next scheduled event in a user-friendly GUI.
- Implemented Twilio for automated SMS notifications, complementing speaker alerts, which decreased missed event notifications.