

ABDUL BAREK

AUTOMOTIVE AND MECHANICAL ENGINEERING

Ilford, London, UK | +44 7507 266121 | contact@abdulbarek.com

linkedin.com/in/abdulbarek100 | abdulbarek.com

PROFESSIONAL PROFILE

MSc Automotive Engineering graduate with nearly three years of industrial mechanical engineering experience, progressing from Junior to Senior Assistant Engineer. Combines practical fault diagnosis, maintenance and team supervision with academic work in electric vehicles, powertrains and vehicle dynamics using MATLAB and Simulink. Completed passenger-vehicle repair and maintenance training at Navana Toyota. Seeking automotive or mechanical engineering opportunities in testing, simulation, vehicle development or maintenance.

TECHNICAL SKILLS

Modelling and analysis: MATLAB and Simulink; academic electric-vehicle modelling, powertrain analysis and vehicle dynamics.

Mechanical engineering: Fault diagnosis, preventive and corrective maintenance, equipment inspections, safety checks and turnaround support.

Automotive knowledge: Internal combustion engines, electric and hybrid powertrains, suspension dynamics and PEM fuel-cell performance.

Data and communication: Excel calculations and charts, engineering data interpretation, technical reporting, teamwork and technical staff supervision.

CAD: Basic academic exposure through engineering assignments.

ENGINEERING EXPERIENCE

Senior Assistant Engineer | Real Oil, Bangladesh

December 2023 – November 2024

- Led mechanical fault diagnosis and maintenance activities, working with technical colleagues to investigate equipment problems and coordinate repairs.
- Supervised technical staff and supported equipment safety checks, quality compliance and process improvement activities.

Junior Assistant Engineer | Real Oil, Bangladesh

December 2021 – November 2023

- Supported preventive and corrective maintenance, mechanical troubleshooting and equipment inspections.
- Assisted with shutdown and turnaround work, following workplace health and safety procedures.

INDUSTRIAL TRAINING

Navana Toyota 3S Center | General Repair Section | Dhaka, Bangladesh

1 September – 23 November 2015 | 12-week industrial attachment

- Supported basic passenger-vehicle repair and maintenance in a Toyota service-centre environment.

EDUCATION

MSc Engineering (Automotive) | University of Hertfordshire, UK

2025 – 2026 | Automotive Engineering programme; completed July 2026

BSc in Mechanical Engineering | Sonargaon University, Bangladesh

2016 – 2021

Diploma in Engineering, Automobile Technology

Dhaka Polytechnic Institute, Bangladesh | 2011 – 2016

SELECTED AUTOMOTIVE PROJECTS

Educational PEM Fuel Cell Stack | MSc dissertation

- Investigated the performance of an educational proton exchange membrane fuel-cell stack, examining electrical output and operating behaviour.
- Used experimental results and engineering analysis to assess performance and discuss practical limitations of the educational system.

Electric Vehicle Modelling | MSc coursework

- Used MATLAB and Simulink for electric-vehicle modelling and analysis of vehicle performance and energy use.

Engine and Powertrain Performance | Honda CB500

- Analysed supplied engine data using Excel to calculate shaft power and brake-specific fuel consumption.

Fuel Cell Hybrid Electric Vehicle Range Extender

- Analysed Renault Zoe-based hybrid configurations, battery state of charge and hydrogen use in MSc coursework.

Vehicle Dynamics and Suspension Analysis

- Completed academic work on Mazda MX-5 handling and a quarter-car model, developing understanding of vehicle response and suspension dynamics.

PROFESSIONAL DEVELOPMENT

MATLAB Onramp and Simulink Onramp | MathWorks | Completed

LEADERSHIP AND VOLUNTEERING

Leo Club of Dhaka Platinum Unique

President, 2024 – 2025 | Previously Vice President and Treasurer

Member since 2018, contributing to community service and club activities through successive leadership roles.

LANGUAGES

Bengali: native | English | Hindi and Urdu: intermediate