

Alexander Devlin MEng (Hons) AMIMechE



Personal Profile:

I am a driven and enthusiastic high achiever that is passionate about technology, innovation, and sustainability. My experience as a mechanical engineer has equipped me with an arsenal of analytical and problem-solving skills to help answer many challenging technical & strategic questions throughout my career.

I believe my key value-add attributes are **(1)** my keen eye for detail, **(2)** strong technical competence, **(3)** drive to complete complex tasks and take ownership of deliverables, **(4)** ability to work as team-player & project leader and **(5)** people management skills.

D.O.B: 08 / 05 / 1995 | Age: 26

Employment:

2018 - Present Business Consultant – Technology Strategy, Ricardo Strategic Consulting

08/21 - Present Consultant⁶

01/21 - 08/21 Senior Business Analyst^{4,5}

09/19 - 01/21 Business Analyst^{1,2,3}

- Alex is an experienced consultant, working with international clients on globally renowned projects relevant to the fuels & energy transition
 - Receiving recognition for published work at COP26: a study presented at the **International Chamber of Shipping** event on 'R&D requirements for a decarbonisation of shipping: <https://ricardo.com/news-and-media/news-and-press/ricardo-and-ics-report-states-r-d-investments-needed-to-reach-zero-carbon-emissions-in-shipping>
- Has experience in developing simple and accessible Excel-based Life Cycle Assessment modelling tools, used by **Zemo Partnership** to conduct in-house LCA's for the LDV market
- Responsible for the clean-sheet development of a Total Cost of Ownership (TCO) modelling tool, which has been used & re-used on multiple projects to identify key sensitivity factors in the price-parity point for alternative fuels & technologies, modelling covered: Hydrogen, Ammonia and Methanol fuels, ICE, and fuel cells. Considered factors such as the Levelized Cost of Fuel, future carbon pricing scenarios (i.e., OPEX) and CAPEX
- Extensive experience with the 'scenarios-based' modelling approach: developing plausible future scenarios' characterised on two-axis of uncertainty, to frame complex analysis. Adjusting parameters to identify in which scenarios technologies & fuels are most favourable
- Keen advocate and promoter in the use of **data visualisation tools** such as Power BI
- Instrumental in winning new work with experience in **written proposals**, developed relationships with new customers and actively involved in **pursuing new business development opportunities**
- Supporting delivery of large **strategic development programs** for internationally renowned firms in; automotive, marine and technology sectors. Involvement in major business **investment & divestment studies**, identifying growth opportunities or potential threats for clients. Assumed a **mentorship / leadership role**, helping new colleagues deliver client programs

07/18 - 09/19 Development Engineer, Simulation & Analysis – Ricardo Automotive & Industrial

- 0D modelling of xEVs over different duty cycles and ICE modelling in WAVE. Required extensive use of MATLAB-Simulink.
 - Acknowledged in published work: https://doi.org/10.1007/978-3-658-25889-4_9

Education

2013–2018 MEng (Hons) in Mechanical Engineering - **First Class Honours degree**
(University of Surrey, 5-year course, including 1-year industrial placement)

2006–2013 The Weald School & Sixth Form

A Levels ('13) **Maths (A*), Physics (A), Design Technology (A)**

AS Level ('12) **Economics (A)**

GCSE's ('11) 11 incl. **Maths (A), Physics (A*) and English (A*)**

Roles and Contributions:

- Utilising recognised **business strategy tools & development frameworks** to conduct comprehensive evaluations of businesses strategic plans
- Formed **Functional / Physical Matrices** for early stages of product development – a Systems Engineering approach
- Applying economics concepts to understand micro-economic trends and conduct initial '**Scenario Conceptions**'
- Interim product development reports produced for group projects, including Product Design Specifications (**PDS**), **PDR** (Review) and Critical Design Reviews (**CDR**)
- Project Manager (PM) roles undertaken, working with Microsoft Project (**MSP**) to ensure the team was clear on their tasks and able to deliver on time and within budget
- Several **Team Leader / Project Manager** roles assumed throughout my academic career, most recently PM for the large scale 'Guildford Station Redevelopment' [multi-disciplinary] project, which was awarded best conceptual design by supervisors

Software Advanced user of **Microsoft Office suite**, including **Excel & VBA**. Extensive use of other software including **PowerBI**, **Unipilot** and **MATLAB-Simulink**. Basic use of **Python** – ongoing.

Achievements

Mentoring: Member of the 'Student Ambassador' committee at University prescribed to help new students settle in, facilitate campus tours along with other responsibilities.

Teamwork: An active member of project teams in academia and my professional career. Sporting enthusiast – latest achievement is reaching Arundel cup final with my local football team.

Leadership: Opted-in to the Junior Sports leadership Award (JSLA) whilst at school in 2011. Aimed at helping to support local schools with developing sports and team-based activities.

Awards and Membership of Influences

IMechE: Associate member of the Institute of Mechanical Engineers. Signed up for the '**Renewable Energies**' course orchestrated by the Royal Academy of Engineers (RAE) at Loughborough University (September 2014).

Sixth Form: Won the '**Technical Excellence**' award in college, July 2013. Awarded for hard-work and resilience despite facing challenges along the way.

Scholarships: Awarded **two paid scholarships** in academia at undergraduate and graduate level – funded with support from my final year supervisor (2013/2018).

Interests

Sport: I have been a member of several clubs over the years including football, cricket and golf. Currently a member of the Ricardo gym and Golf Society.

Social: I aim to ensure a good work-life balance with friendship groups at home, from work and University – still regularly meeting with close friends from university with a recent trip to Mexico.

Teaching: Tutoring GCSE and A level students in my spare-time, having been employed by my school in 2012.

References Available upon request.