Experience

Aston Martin Lagonda — Project Manager DB11&DBS Car line

2017 - Present

- Reporting to the Vehicle Line Director supporting P&L achievement, responsible for driving programme commercial activity to meet and exceed EBITDA targets, managing new vehicle programmes from £1mm-£250mm
- Responsible for cost and timing control to deliver programmes to business plan investment targets.
- Writing work packages to deliver new vehicle models in a controlled phase-gate process.
- Owner of product definition documentation for all DB11 and DBS programmes with remit to negotiate product content with all areas of the business to support volume forecast and budget compliance.
- Key achievements: Launched 3 vehicle models in 12 months through strategic compression and optimization of engineering timing plans to longest lead time item, and personally managing prototype builds and production readiness assessments. Delivered business modelling and product optimization analysis to improve margin on product mix leading to £3mm profit improvement over 1 year.

Burnertech Combustion Engineers — Design Engineer

2016

Developed market leading low CO2 and NOx burnerhead designs for power generation and water and air heating applications from 50kW to 2.2MW leading to successful project delivery to clients and improved off-shelf product range. I developed solutions to increase power output to meet new customer requirements and architected internal company new product introduction processes to improve company culture and project completion speed. Daily use of solidworks including sheetmetal and FEA.

Cummins Turbo Technologies — Mechanical Engineer

2014-2015

- First Rotation: Turbocharger Aerodynamics/CFD design optimization six sigma project lead to 5% efficiency improvement across compressor stage.
- Second Rotation: Designed new online collaboration tool and introduced to 1000 staff on site for online document sharing.
- Third Rotation: Applied Mechanics software engineering data analysis of real world data to predict design life, developed nCode Python script to efficiently handle millions of data points to predict fatigue based damage accumulation.
- Fourth Rotation: future product testing: Conducted thermal (FEA and physical) and mechanisms analysis to suggest and implement design changes to remove critical failure modes seen during testing of variable geometry turbine stage.

Education

The University Of Sheffield MSc Mechanical Engineering & Industrial Management, 2:1 / Merit 2016-2017

- winner of a full scholarship based on leadership ability to positively impact other members of my cohort.
- Advanced mechanical engineering and business school modules.
- Thesis and coursework in aerodynamics for automotive and rail applications.
- Project and group work in business analysis, and project and risk management.

The University Of Salford BEng(hons) Mechanical Engineering, 1:1 First Class

2012-2016

• Awarded Salford business school social enterprise award as founder of university formula student team.

Skills

Business: Advanced Excel and PowerPoint, business analysis,MS Project, Product, Programme & Risk Management, stakeholder management, Cross functional team leadership

Languages & Software: Python, VBA, Java, HTML/CSS/JavaScript, Solidworks, Ansys, TeamCenter, Keyshot

Technical: Computational Fluid Dynamics (CFD), Finite Element Analysis (FEA), Six Sigma, PPAP, CAD including Surfacing and Manufacturing Drawings, DFMEA, GD&T, Component Design, Mechanism Design.

Extracurricular Leadership

Head of Aerodynamics, Sheffield Formula Racing, 1 mentee.

Founder and Team Director, Salford University Formula Student Team, 18 direct reports Chairman, Salford University Engineers Union committee of 8, serving 100 members STEM Stand Designer, Big Bang Fair, Birmingham NEC 40 team members STEM Ambassador, Museum of Science and Industry, Manchester 12 team members