Location: **Midlands**, United Kingdom Mobile: **00 44 77233 67824 •** E-mail: **vihar@malviya.net**

- Experienced and motivated leader with the ability to direct, manage and work in globally located teams.
- Understands strategic vision with an ability to formulate a strategy to execute it.
- Skilled project manager with PRINCE2[®] certification. Highly competent in establishing KPIs & associated metrics.
- Experienced in global team leadership, physical & virtual product development & a natural problem solver.
- Assertive Chartered Engineer, proficient in analysis-led design of automotive systems.
- Extensive knowledge of product development processes, business processes & workflows.
- Excellent engineering fundamentals with published research & doctorate in aerodynamics, vehicle stability and fuel efficiency.
- Natural ability to mentor graduates and early professionals with potential to excel.

WORK EXPERIENCE

NOTEWORTHY CURRENT / RECENT EXPERIENCE

Sep 2015 to present:

Engineering Manager RLE International Product Development Ltd., Essex &

- Warwickshire (UK) o Liaising with clients and identifying cross-sector
- growth opportunities for business development.Providing strategic input to the company road map
- & supporting directors in executing the company vision.
- Responsible for managing resources for engineering projects - on and off shore personnel.
- Liaising with, and supporting engineering project leaders and tracking project timing, resources and costs.
- Developing project management, administration, progress and issue tracking and reporting tools.

Aug 2022 to Present:

Key Account Manager – Engineering Projects (Aston Martin) RLE International Product Development Ltd.,

Warwickshire (UK)

- o Responsible for providing engineering services to OEM for delivering projects.
- o Management of staff deployed on programs across various departments.
- o Managing individual expectations for different client Engineering Managers.
- o Resolving issues & arbitrating conflicts.o Understanding client expectations of individual
- Understanding client expectations of individuativities & preparing quotes.
- Reviewing status of delivery with clients.Establishing & tracking KPIs to maintain
- profitability & grow account.
- o Reporting weekly, monthly & annual status to RLE management & client.
- Working with RLE functional leaders & recruitment to identify appropriate resources to fulfil project requirements.

Jan 2023 to Present:

Vehicle Line Manager – Body Structures (DB12 & Vantage) Aston Martin [through RLE International Product Development Ltd.], Warwickshire (UK)

- Responsible for coordination & management of program deliverables of functional team.
- Accountability of engineering deliverables like releases.
- Coordination of build & test issues, containments and resolution implementation
- o Management of functional budget & costs.
- Representation of functional input for gateway events.

Previous experience

- Aug 2020 to May 2022: Senior Project Manager Level 5 Autonomous EV Engineering
 - Project 3 Mobility [through RLE International Product Development Ltd.], Warwickshire (UK)
 - Leading a team of senior managers, subject matter experts & executives to successfully quote & win a turn-key automotive product development project, worth approx. €50M, for a level 5 autonomous vehicle.
 - Management of an engineering organisation for development of automotive commodities, electrical, powertrain systems, vehicle integration, testing development and the project management office.
 - Working with OEM to establish project deliverables. Supporting the OEM in optimisation of the project timing.
 - o Providing direction & guidance to project management office for establishing full suite of KPIs & associated metrics.
 - Chairing regular project reviews to measure overall project health, identify risks, provide direction, arbitrate conflicts and work with OEM to provide the necessary support to the project delivery organization.
 - o Establishing a framework for large scale project control with a complex set of resources.

• Feb 2017 to Sep 2020: Project Leader – Vehicle Outrigger Systems

Jaguar Land Rover & Aston Martin [through RLE International Product Development Ltd.], Warwickshire (UK)

- Leading an engineering & manufacturing team for development & delivery of outrigger systems for stability testing of prototype vehicles.
- o Ensuring the design meets functional, safety, performance, manufacturing, assembly and vehicle fitting requirements.
- o Apply analysis-led-design to minimise design churn.
- o Maintaining archetype standards for quick deployment of established design practices and lessons learnt.
- o Regularly presenting the concept and design to the client.
- o Managing the manufacturing teams and suppliers to deliver as per cost, quality and time.

Apr 2020 to Sep 2020: Project Manager – Wireless EV Charging Integration

Sprint Power [through RLE International Product Development Ltd.], Warwickshire (UK)

- Management of a functional team to benchmark, design & develop engineering solutions to retrofit a wireless induction charging system to existing electric vehicles.
- o Exploring engineering solutions to deliver functional & legal requirements within mechanical & electrical constraints.
- o Liaising with cross-functional teams for inputs as well as delivering the engineered data within timing constraints.
- o Providing direction and making key decisions to ensure consistent progress.

Jan 2020 to Apr 2020: Project Manager – Electric Pickup Truck Engineering

- Lordstown Motor Corporation [through RLE International Product Development Ltd.], Warwickshire (UK) & Dearborn (USA)
- o Management of project to deliver the design and development of an all-new electric vehicle platform for a new OEM.
- o Management, consolidation and reporting of deliverables for globally located teams to ensure achievement of coherent and consistent objectives.
- Coordination of activities, prioritization of tasks and alignment of teams with suppliers and OEM to achieve planned deliverables within timing and cost targets.
- o Providing direction to commodity and functional teams and making key decisions to ensure consistent progress.

Oct 2019 to Jan 2020: Virtual Validation (CAE) Manager & Integration Engineer

- Lordstown Motor Corporation [through RLE International Product Development Ltd.], Warwickshire (UK) & Dearborn (USA)
- o Leading the functional team for virtual verification of the design for a new platform for an electric pickup truck, using established CAE tools.
- o Delivering the validation suite to satisfy vehicle requirements within prescribed deadlines.
- Leading the safety and compliance team to identify detailed requirements for legal, insurance and consumer regulations for homologation and occupant safety.
- Jul 2019 to Oct 2019: Project Management Engineer
 - Lordstown Motor Corporation [through RLE International Product Development Ltd.], Warwickshire (UK) & Dearborn (USA)
 - o Product development strategy & planning for a new vehicle platform for a North American automotive start-up OEM.
 - o Development of infrastructure and strategy for bill of materials, vehicle attributes and engineering road map.
 - o Establishing deliverables for key milestones for the full duration of the project.
 - o Liaising with engineering project and commodity teams to ensure robust adherence to processes and standards.

May to Jun 2019: External examiner for Doctoral Research Degree (PhD)

University of Huddersfield, Huddersfield (UK)

- o Review of doctoral thesis and examine the candidate through viva voce.
- Ensure that the quality of the work and that of the consequent thesis meets the highest possible technical and literary standards, commensurate with a doctoral research degree.
- Apr 2019 to Jun 2019: Package Team Leader
 - Aston Martin Red Bull [through RLE International Product Development Ltd.], Milton Keynes (UK)
 - o Leading a team of assessment engineers for cross-functional package integration on a low-volume hybrid hyper car.
 - o Liaising with engineering project teams to ensure robust adherence to package standards.
- Sep 2017 to Apr 2019: TVM Team Leader

Aston Martin [through RLE International Product Development Ltd.], Warwickshire (UK)

- o Leading a team of TVM engineers for cost reduction of automotive body content for OEM of premium sports GT vehicles.
- o Coordinating engineering changes on low volume products with annual targets between £500k & £1M.
- Preparing fact-based plans and managing micro-teams for each change.

Feb to Sep 2017: Virtual Validation (CAE) Manager – Body Panels & Structure

Aston Martin [through RLE International Product Development Ltd.], Warwickshire (UK)

- o Leading a functional team for virtual testing of automotive body structure, panels, closures and trim for a premium GT SUV.
- o Delivering the validation suite to achieve vehicle requirements within prescribed deadlines.

• Jan to Sep 2015: Virtual Validation (CAE) Manager – All Body Systems

McLaren Automotive [through RLE International Product Development Ltd.], Essex & Surrey (UK)

- o Responsible for expanding virtual testing capability of the organisation to include other global sites of the group.
- o Leading a CAE team for virtual development of automotive body panels, closures & trim for a luxury super car program.
- o Managing globally located engineering teams for virtual development within prescribed deadlines.

• Oct 2013 to Sep 2017: Product Development Process SME & Trainer

RLE International Product Development Ltd., Essex (UK), Valencia (Spain) & various locations (Germany)

- o Lead the concept development of framework of in-house product development based on industry best practices.
- o Generation of intuitive, concise and quick-to-deploy training material for agile product launch teams.
- o Conducting workshops for automotive product launch teams.
- o Creation and maintenance of comprehensive library of application-specific business process documentation.

• Mar 2012 to Feb 2017: IMechE Liaison

RLE International Product Development Ltd., Essex (UK)

- o 'Point of contact' with IMechE, to organise membership activities and professional registration of employees.
- o Providing guidance and support to staff members in the process of professional registration.

• Nov 2013 to Sep 2015: Project Manager – Consortium Partner

- Innovate UK [through RLE International Product Development Ltd.], various locations (UK)
 Leading a functional team in a consortium for a government funded vehicle development project worth £1.9M.
- Liaising with consortium partners on product development and project issues.
- Periodically reporting team progress and status to company leadership, consortium management and the funding organisation.
- May 2011 to Sep 2017: EV Development Engineer
 - RLE International Product Development Ltd., Essex (UK)
 - Development & testing of in-house electric vehicle.
 - Performing application trials & drive cycle analysis using on-board data acquisition.

May 2011 to Oct 2013: Technical Project Coordinator

- RLE International Product Development Ltd., Essex (UK)
- o Leading an administration & coordination team to support design & engineering of vehicle body structure development for high volume medium duty van.
- o Organising & tracking automotive tests for design verification to support new product development.
- o Liaising with OEM stakeholders to map requirements, processes & integrating with OEM processes & systems.
- o Liaising with engineering, manufacturing, finance & purchase teams & tracking project timing, costs, issues & changes.

Jan 2009 to Sep 2010: International Student Ambassador

University of Huddersfield, Huddersfield (UK)

- o Email-based interaction with & management of queries for prospective as well as enrolled international students.
- o Managing non-academic queries from prospective international students & those newly arrived in the country.
- Jan 2007 to Oct 2010: Supporting Lecturer as Researcher University of Huddersfield, Huddersfield (UK)
 - Delivering theoretical lectures, designing and conducting laboratory experiments and evaluation of student performance for Mechanical Engineering modules of Thermo-fluids and CFD.
 - o Supervision of academic projects for M.Sc. students and providing academic support to undergraduate and post-graduate students.

Feb 2004 to Oct 2006: Customer Service Consultant

- GTL Limited, Mumbai (India); GE Money, Leeds (UK); and Halifax Bank of Scotland, Leeds (UK)
- o Interaction and management of customer queries and concerns relating to financial savings products.
- o Telephone-based sales of value-added financial services to existing customers of various financial products.
- o Providing telephone-based customer service for a UK-based telecommunications provider.
- o Telemarketing of financial products to customers in USA and UK.

QUALIFICATIONS & CERTIFICATIONS

PRINCE2 Practitioner, Axelos (UK), Mar. 2022
 <u>PM Principles</u>: Continued business justification; Learning from experience; Defined roles & responsibilities; Managing by stages; Managing by exception; Focus on output; Tailoring to requirements.

 <u>PM Themes</u>: Business case; Organization; Change; Risk; Progress; Plans; Quality.
 <u>PM Processes</u>: Project Start; Project Initiation; Project Direction; Stage Control; Stage Boundaries; Product Delivery; Project Closure.

- Ph.D. Mechanical Engineering, full time research, University of Huddersfield (UK), Sep. 2006 to Feb. 2011
 <u>Thesis</u>: Effects of a Novel Aerodynamic Intervention for Heavy Commercial Vehicles on Fuel Saving and Stability.

 <u>Teaching Activities</u>: Supporting lecturer for delivering theoretical lectures, designing and conducting laboratory experiments and evaluation of student performance for Mechanical Engineering modules of Thermo-fluids and CFD. Supervised MSc projects.
- M.Sc. Automotive Systems Design & Analysis, full time taught, University of Huddersfield (UK), Sep. 2005 to Sep. 2006
 Distinction (73%)

Automotive Chassis Systems: Wheels, suspension and braking system design. Vehicle Dynamic Performance Evaluation: Vehicle performance, stability and fuel consumption. Computer Aided Vehicle Design: 3 dimensional computer-aided design and engineering. Design Analysis: Finite element analysis. Refinement, NVH & System Measurement: Vehicle ride frequencies, noise, vibration and harshness. Vehicle Aerodynamics and Air Management: Aerodynamic forces and moments, air management systems.

• **B.Eng.** *Instrumentation and Control*, full time taught, University of Pune (India), Sep. 1998 to Dec. 2003 Higher Second Class (56.93%, equivalent to UK 2.1)

AFFILIATIONS

- Institution of Mechanical Engineers (IMechE), May 2013 to present Chartered Member (CEng MIMechE).
- Vehicle System Dynamics International Journal of Vehicle Mechanics and Mobility, 2017 to present Reviewer.
- Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engg., 2019 to present Reviewer.
- Institution of Mechanical Engineers (IMechE), Feb 2012 to May 2013 Associate Member (AMIMechE).
- International Society of Automation (ISA), Pravara Division (India), 1999 to 2000 Industrial Liaison.

OEM PROCESS SKILLS AND EXPERIENCE

- <u>Aston Martin Lagonda</u> : Goldcrest, ECMS2, CMS, Wave, TcVis, ERN, PCR, concerns, containments.
- Ford Motor Company : GPDS Product Development, WERS & AVBOM parts management, AIMS issues, WACTS, Change management, EFDVS requirements management, INTEGRATOR deliverables management, Ford-specific launch proficiency.
- Jaguar Land Rover : Basic change management, launch fundamentals.

COMPUTING SKILLS

Business Software Packages

- Project management packages like Microsoft Project, Jira & Smartsheet.
- Basic knowledge of data analysis tools like *Microsoft Power BI*.
- Excellent proficiency in data analysis using *Microsoft Access & Excel*.
- Office suites *Microsoft Office/365* (*Outlook, Word, Excel, PowerPoint*), *Google Suite* and *Libre Office*.
- Collaboration tools like *Microsoft SharePoint* and *Google Drive*.

ENGINEERING SOFTWARE PACKAGES

- Very good working knowledge of PLM environment Teamcenter Enterprise[®].
- Very good working knowledge of 3D visualization & interrogation tool Teamcenter Visualization Mockup[®].
- Good working knowledge of mathematical development, computation and analysis package (MATLAB[®])
- Good knowledge of Computational Fluid Dynamic (CFD) analysis (*Fluent[®]*, *OpenFOAM*, *COSMOSFloWorks[®]*) packages.
- Basic knowledge of 3-D modelling (*SolidWorks[®]*, *Pro/ENGINEER[®]*) and finite element analysis (*Pro/MECHANICA[®]*) packages.

PROGRAMMING AND SCRIPTING

- Very good working knowledge of POSIX-compliant Linux-based scripting.
- Very good working knowledge of Visual Basic[®], XML, HTML 5, CSS 3, Javascript, PHP & Python.
- Good working knowledge of *Git* version control and associated platforms like *Github*, *Gitlab* & *BitBucket*.
- Basic knowledge of *C*, *C++* and assembly language programming of microprocessors and microcontrollers.
- Basic knowledge of Programmable Logic Controllers (PLC) ladder programming.
- Basic knowledge *Windows*[®] platform scripting.

ACADEMIC PROJECTS

• Oct. 2010: Research Project

Design and Optimisation of a Novel Aerodynamic Fuel-Saving Device

This project involved computational fluid dynamic (CFD) and experimental analyses of a novel add-on fuel saving device for heavy commercial vehicles (HCV). Funding for this project was secured from Yorkshire Forward through technical and commercial presentations. A retrofit device was developed in collaboration with industrial consultants, a freight operator, a trailer manufacturer and a fabricator. The developed device was successfully field-tested on the test track at MIRA (Nuneaton, UK).

• Sep. 2009: Equipment Purchase

Flow Measurement Instruments in Automotive Laboratory

This project involved establishing technical specifications and negotiating with suppliers for purchasing of various flow measuring instruments with a total project worth of up to £150k for University of Huddersfield. This included particle image velocimetry (PIV), laser Doppler anemometer (LDA), 6-component balance for the wind tunnel and a multi-purpose 3-axis traverse system.

• Sep. 2006: M.Sc. Project

Analysis & Solution of Brake Squeal for Carbon Ceramic Disc Brake Rotor for Bentley Motors Limited

Multiple analyses and validation of a given noisy brake were carried out using finite element modal analysis, tap testing, LMS* frequency analysis and extensive laboratory testing. Various solutions using mathematical modelling, spacer shims, and disc brake pad profiling using established theories.

• Apr. 2003: B.Eng. Project

Microcontroller-Based Automotive By-Wire Systems

This project involved implementation of throttle-by-wire and steer-by-wire systems in a leisure kart using a MCS-51 microcontroller. The kart used in this project was sponsored by a popular kart manufacturer. Simple mechatronic systems were developed by replacing essential mechanical connections with electronic links, all centrally controlled by a microcontroller. Electronic control was successfully achieved by employing transducers and actuators to complete the mechatronic link.

ACHIEVEMENT

Magazine Feature

Science Engineering and Technology Worldwide (SET), Vol. 4, Issue 4, pp. 83.

Student profile featured on being awarded a full scholarship for a three-year full time university-funded research program from the University of Huddersfield (UK); based on scoring a distinction in the preceding Master's degree (MSc), leading to PhD degree.

SKILLS & COMPETENCIES

- Proficient in written & spoken English; and able to communicate effectively with seniors, peers, colleagues & clients.
- Manage globally located teams of members with diverse work cultures & skills. Provide clear direction & arbitrate conflicts.
- Able to consolidate and analyse information, make decisions and provide direction.
- Able to approach problems in a logical and scientific manner.
- Natural ability to mentor graduate and early professionals.

PUBLICATIONS

JOURNAL ARTICLES

- Apr. 2018: Arabian Journal for Science and Engineering. 2018, pp. 1-19, doi:10.1007/s13369-018-3185-3 Malviya V, Asim T, Sendanayake I, 'Development of a Novel Characterisation Methodology for the Aerodynamic Coefficients of a Tractor–Trailer Unit Based on Relative Flow Angles and Vehicle Dimensions'.
- 2. Oct. 2014: Applied Mathematical Modelling. Vol. 38, Issues 19-20, pp. 4756-4777, doi: 10.1016/j.apm.2014.03.029
- Malviya V, Mishra R, 'Development of an analytical multi-variable steady-state vehicle stability model for heavy road vehicles'. 3. Jun. 2010: Advances in Mechanical Engineering. Vol. 2010, doi:10.1155/2010/763718
- Malviya V, Mishra R, Palmer E, 'CFD Investigation on 3-Dimensional Interference of a Five-Hole Probe in an Automotive Wheel Arch'.
- Dec. 2009: Engineering Applications of Computational Fluid Mechanics. Vol. 3, Part 4, pp. 587-607. Malviya V, Mishra R, Fieldhouse J. 'CFD Investigation of a Novel Fuel-Saving Device for Articulated Tractor-Trailer Combinations'.

CONFERENCE ARTICLES

 Dec. 2010: 37th National & 4th International Conference on Fluid Mechanics and Fluid Power, Chennai (India): Indian Institute of Technology

Malviya V, Mishra R, Ubbi K, 'CFD Analysis on the Influence of Area of the Exposed Semitrailer Face on the Aerodynamic Drag for a Tractor-Trailer Combination'.

- 6. Dec. 2009: Computing and Engineering Annual Researchers' Conference, Huddersfield (UK): University of Huddersfield Malviya V, Mishra R, Gundala N. 'Effect of Cross Wind on Aerodynamic Coefficients of Ground Vehicles'.
- Dec. 2009: Thirty Sixth National Conference on Fluid Mechanics and Fluid Power, Pune (India): Kirloskar Brothers Limited. Malviya V, Mishra R, Gundala N. 'CFD-Based Modelling of the Variation of Aerodynamic Coefficients with Wind Angle' (69-CFD-13).
- Jun. 2009: 12th EAEC European Automotive Congress, Bratislava (Slovakia): Slovak Society of Automotive Engineers. Malviya V, Mishra R, Fieldhouse, J. 'Enhanced Vehicle Stability Model'
- 9. Dec. 2008: Computing and Engineering Annual Researchers' Conference 2008, Huddersfield (UK), Huddersfield (UK): University of Huddersfield, pp. 1-8.
 - Malviya V, Mishra R, Fieldhouse J. 'Comparative Computational Analysis of Drag-Reducing Devices for Tractor-Trailers'.

10. Dec. 2007: *Thirty Fourth National Conference on Fluid Mechanics and Fluid Power,* Ranchi (India): Birla Institute of Technology, pp. 113-122.

Malviya, V., Mishra, R., Palmer, E. and Majumdar, B. (2007) 'CFD Based Analysis of the Effect of Multi-Hole Pressure Probe Geometry on Flow Field Interference'.

11. Dec. 2007: Computing and Engineering Annual Researchers' Conference 2007, Huddersfield (UK): University of Huddersfield. Malviya V, Mishra R, Palmer E, Majumdar B. 'Numerical Analysis and Optimisation of Multi-Hole Pressure Probe Geometry'.

REFERENCES

References are available on request.