



# MANGESH KULKARNI

LEADING PRODUCT INNOVATION & STRATEGY

## CONTACT

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- LinkedIn Profile

## EDUCATION

- 2003 - 2005  
COEP, MH, India
  - Master in Tech (M.Tech) in Digital Systems
- 2000 - 2001  
PIAT-SITM, MH, India
  - Post Graduate Diploma in VLSI Design & Tools
- 1996 - 2000  
WCE, MH, India
  - Bachelor of Engineering (B.Engg) in Electronics & Communication

## CERTIFICATIONS

- Architecture & System Engineering by MIT xPRO
- Certification for Scrum Product Owner, Valeo, Ireland
- Systems Eng Modelling using SysML Training, Valeo Ireland
- Program Management Training, Valeo Ireland

## PROFILE

Experienced engineering professional with 24+ years in product design, development, and deployment spanning Autonomous driving, ADAS, Multimedia, Semiconductor design, and IoT. Proven leadership in managing multi-site teams globally. Possess 12+ years of technical hands-on/Project Lead experience, 5+ years in Software & System Architecture, and 5+ years in Product/Program Management. Recognized for strong problem-solving skills, technical proficiency, and dedication to customer satisfaction. Adaptable and motivated, contributing across the entire product lifecycle, from needs specification to execution. Effective in cross-functional, multi-cultural collaboration, with a track record of excellence in technical project management.

## WORK EXPERIENCE

- Valeo Vision Systems, Ireland** **Aug-2023 - Present**  
**AD/ADAS Senior Solution Architect**
  - Client-Centric Solution Formulation** - Collaborated with customers and Business Development Managers to create advanced AD/ADAS solutions for EMEA and APAC, emphasizing L2+ and beyond autonomy levels as part of RFI/RFQ response.
  - Solution Design and Architecture:** Leading the definition and roadmap of technical solutions and catalogues for ADAS Parking ECU and AD Domain controller that meet customer demands for EMEA and APAC region, ensuring alignment with their requirements and company capabilities.
  - Strategic Supplier Collaboration** - Facilitated interaction with third-party Silicon suppliers, optimizing the AD/ADAS ECU and Domain controller product portfolio.
  - Support for Commercial-Technical Alignment** - Analyzed business requirements and targets and helped to translate them into precise technical specifications for effective solution development.
  - Manage Customer Engagement & support sales:** Building and maintaining strong relationships with key clients, understanding their business challenges, and proposing tailored solutions.
- Taoglas IoT Solutions, Ireland** **Feb-2022 - Jun-2023**  
**Head of Connected Vehicle Solutions**
  - Strategic Roadmap Development** - Crafted a forward-looking strategic roadmap for Taoglas IoT Solutions BU's Connected Vehicle Solutions Vertical, setting the stage for future growth and innovation.
  - Financial Strategy Leadership** - Led the formulation of both short-term and long-term funding strategies, ensuring financial stability and robust support for ongoing and upcoming initiatives within the vertical.
  - Supplier and Contract Management** - Oversaw supplier relationships and contracts for CV2X and 5G TCU product offerings, cultivating effective partnerships and ensuring contract adherence.
  - Exemplary Product Delivery** - Successfully delivered a reference TCU platform for a North American OEM, demonstrating reliability and excellence in product delivery.
  - Versatile TCU Architecture Design** - Designed TCU architecture tailored to diverse market segments within the Transportation vertical, covering everything from passenger vehicles to micro-mobility.
  - Quality Management System Development** - Developed a robust Quality Management System (QMS) and process framework based on ASPICE for the Transportation and Connected Health Verticals, ensuring strict adherence to industry standards and best practices.

## SKILLS

- Leadership
- Technical Program Management
- Product Management
- R&D Budgeting
- Strategic Planning
- Stakeholder Management
- Risk Management
- Change Management
- Resource Management
- C-Level Communication

## TOOLS

- IBM DOORS
- Jama Connect
- Enterprise Architect
- Atlassian Jira & Confluence
- Gsuite and Microsoft Office

## LANGUAGES

- English (Fluent)
- Marathi (Fluent)
- Hindi (Intermediate )

## PERSONAL PROFILE

- Civil Status - Married
- Citizenship - Irish (Naturalized)

## SOCIAL PROFILE

- Committee member  
(Treasurer) for badminton club  
in Ireland
- Active coordinator for college  
level symposiums
- Associated with Snehwan  
orphanage as part of CSR in  
India

## REFERENCES

- Available upon request

## WORK EXPERIENCE

- **Valeo Vision Systems, Ireland** **Apr-2018 - Jan-2022**  
**R&D Technical Product Manager**
  - **Team Leadership in Automotive Innovation** - Manage research and product development teams, driving advanced functions for Autonomous Drive and ADAS segments for Automotive OEMs in China & North America.
  - **Cross-Functional Collaboration** - Collaborate with Hardware, Mechanical, Software, Algorithms & System Validation teams to define end-user function (EUF) scope, risks, dependencies, and resource management.
  - **Proactive Risk Management** - Identify and mitigate project risks during early phases, ensuring full visibility of project schedules, forecasting issues, and managing resourcing needs and dependencies.
  - **Budget and Resource Planning** - Support project management by maintaining and forecasting R&D budgets and MTP, working across multiple sites and ensuring clarity on short-term and long-term scope and deliverables.
  - **Strategic Planning and Supplier Interaction** - Own and maintain Feature by Phase plan, R&D Level 2 plan, and collaborate with suppliers for statement of work, evaluating component capabilities, time to market, and costing to align with market needs.
  - **Technology Integration and KPI Negotiation** - Collaborate with Computer vision and Deep Learning research teams, negotiating expected KPIs and performance for end-user functions (EUF) to meet market demands.
  - **Issue Resolution and Customer Interaction** - Direct the team to resolve technical, logistics, legal, and communication issues, maintaining focus on target customer milestones. Interact closely with customers, managing expectations, and enhancing market competitiveness.
  - **Configuration Management and Quality Assurance** - Ensure all system work products are baselined and managed through Configuration Management & Change Control processes, ensuring quality and compliance.
- **Valeo Vision Systems, Ireland** **Dec-2013 - Apr-2018**  
**Platform System Architect**
  - **Innovative Vision Solutions Leadership** - Spearheaded research, design, and development of next-gen video solutions for ADAS parking and visualization products, contributing to both product and platform solutions.
  - **System Architecture Design Expertise** - Led the development of System Architecture design for vision and fusion platforms based on the technology roadmap, collaborating closely with R&D teams for feasible solutions.
  - **Cross-Functional Collaboration** - Collaborated with Hardware, Mechanical, Software, and Test engineering teams to analyze and develop system solutions, ensuring the allocation of precise system requirements.
  - **Change Request Assessment and Resolution** - Conducted engineering assessments for internal and external change requests, translating them into specific systems requirements updates. Participated in software and hardware design reviews and problem resolution, including SFMEA analysis.
  - **Technology Trend Analysis** - Stayed abreast of technology trends, enabling informed conversations with internal and external customers and providing guidance for roadmap development in areas such as system design, Vision SoC based system development, Edge AI and multimedia framework.
  - **Successful SOP Deliveries** - Successfully implemented Chinese OEM Auto Park Assist & Surround View System for MY21+ and North American OEM Surround View System ECU for MY 19/20/21, featuring advanced camera inputs and CV functionalities.
  - **Global RFQ Support** - Supported RFQs from European OEMs, Asian OEMs, and new mobility customers in North America for MY20+, showcasing a comprehensive understanding of customer needs and industry requirements.

# WORK EXPERIENCE

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- **Marvell Semiconductors, Pune, India** May-2012 - Dec-2013  
**Solution Architect**
  - **Customer-Centric Solution Architecture** - As a Solution Architect for the Smart Energy team, took charge of customer technical support, specializing in solutions for home energy management and energy savings within the smart home business vertical.
  - **Pre-Sales Expertise** - Played a pivotal role in pre-sales customer engagement opportunities, understanding customer requirements and design constraints to offer tailored solutions.
  - **Custom Solution Development** - Assisted customers in developing custom hardware and software solutions, leveraging reference designs and platforms to meet their specific needs in the realm of home energy management.
- **Quartics Technologies, Pune, India** Jul-2008 - Apr-2012  
**Software Architect**
  - Designed media framework and software architecture for Quartics SoC Boca, taking charge of framework design, development, module integration, and unit testing across diverse projects.
  - Spearheaded the MCAL framework architecture design and implementation for QV1751, with a specific focus on the Video Sub System (VSS).
  - Led the design and development of HD Video Conferencing for QV1721, involving the integration of codecs like AVC Encoder/Decoder and post-processing blocks.
  - Designed and developed the AVC Transcoder on QV1721, incorporating codecs such as AVC Encoder/Decoder and post-processing blocks. Developed and integrated the AVC Decoder Hardware Abstraction Layer on QV1721, enhancing the efficiency and performance of the system.
- **Persistent Systems, Pune, India** May-2007 - Jun-2008  
**Software Architect**
  - Orchestrated the design of OpenMAX pipelines for still image capture and video recording for Broadcom Inc., showcasing expertise in multimedia processing.
  - Developed ALSA plugin in Linux user space, utilizing OpenMAX core & IL Client for OpenMAX 1.1.1, contributing to enhanced audio functionalities.
  - Set Top Box Design project involves planning, execution, resource allocation, and development of set top box design.
  - Development of Helix DNA Client for Linux on i386, enabling versatile media playback on PCs and contributing to the seamless integration of different media formats
- **Analog Devices (ADI), Bangalore, India** Aug-2005 - May-2007  
**Senior Software Engineer**
  - Transcoded low bitrate DVDs for optimal playback on in-car entertainment systems, ensuring compatibility across MOST networks.
  - De-multiplexed AC3 audio and facilitated playback from MPEG2 Transport Streams on Blackfin –BF533.
  - Synchronized AV video on two distinct proprietary platforms utilizing BF-533 and BF-561.
  - Implemented optimizations for MPEG2 bitrate transcoding (Quant, VLC) on Blackfin –BF561.
- **Teneoris Networks, Bangalore, India** Dec-2004 - July-2005  
**Senior Software Engineer**
  - Designed and developed an MPEG2 deinterlacer on the Equator BSP15 platform.
  - Implemented down conversion of MPEG2 decoder for HD sequences on Set-Top Box (STB).
  - Optimized MPEG2 decoder performance on the Equator DSP platform to enhance power and efficiency.
- **Conquest Technologies, Pune, India** May-2004 - Dec-2004  
**Software Engineer**
  - Developed new algorithms for H.261 encoder on the Cradle CT3400 platform.
  - Conducted optimizations for both H.264 encoder and decoder on the Cradle CT3400 platform.
- **MES College of Engineering, Pune, India** May-2001 - Apr-2004

Impart knowledge and conduct labs for University courses like VLSI design, Digital Communication Networking and Microprocessor, Hardware labs for Computer Engineering Department.