

SALAHUDEAN BASEM TOHMEH

ROBOTICS ENGINEER AND INDUSTRY 4.0 CONSULTANT | CERTIFIED SIRI ASSESSOR

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SUMMARY

I'm a Robotics Engineer and Certified SIRI Assessor and Industry 4.0 Consultant with 5+ years of hands-on expertise across robotics, AI platforms, and smart factory transformation. Delivered automation solutions across manufacturing, education, and tech startups—bridging digital strategy with scalable execution. Proven track record in implementing ERP, MES, BMS, and IIoT ecosystems. **Holder of a U.S. patent for autonomous drone system (US 11829959B1).**

KEY ACHIEVEMENTS

- **SIRI Certification and Assessments:** Conducted SIRI Assessments for numerous clients across diverse sectors, and created comprehensive Digital Transformation Roadmaps in compliance best practices.
- **Patents & Innovation:** Secured multiple robotics and automation patents, including a U.S. patent for an autonomous UAV pothole detection and repair system, with additional patents pending in Saudi Arabia.
- **Cross-Functional Leadership:** Led strategic collaboration across R&D, engineering, and commercial teams to accelerate technology integration and market entry.
- **Techno-Economic Analysis:** Conducted detailed analyses and market feasibility studies to guide strategic technology deployments and investment decisions.

CERTIFICATIONS & COURSES

- Certified SIRI Assessor (INCIT Certified)
- Massachusetts Institute of Technology (MIT) - Data Science & Machine Learning
- McKinsey & Company Forward Program

PROFESSIONAL EXPERIENCE

Automation & Digital Transformation Consultant, InduBridge

May 2025 - Present

- **Built and engaged in the end-to-end sales lifecycle** — from opportunity identification and solution design to proposal development, stakeholder negotiation, and post-deployment relationship management — driving multi-sector client acquisition and retention.
- **Secured public-sector funding and incentives** under national programs (Future Factories, SIDF Tanafusiya), enabling clients to accelerate investment readiness and implementation timelines.
- **Conducted comprehensive SIRI (Smart Industry Readiness Index) assessments** across FMCG, manufacturing, and food processing sectors, delivering deep insights on digital maturity, technology adoption, and transformation levers.
- **Developed and executed Industry 4.0 deployment roadmaps**, aligning automation and data initiatives with commercial objectives, ROI targets, and long-term competitiveness.
- **Defined strategic commercialization and go-to-market plans** bridging product capability with operational readiness and market positioning.
- **Built business and financial cases for technology investments**—covering benchmarking, risk modeling, and measurable value realization tracking.
- **Applied techno-economic evaluation methodologies** to validate investment feasibility, scalability, and performance improvement potential.
- **Ensured full compliance** with safety, cybersecurity, and regulatory standards throughout automation and robotics deployments.
- **Authored client transformation playbooks** and capability-building toolkits, codifying best practices and knowledge assets for reuse across future engagements.

Lead Project Engineer, Tulip Technologies

Dec 2023 - Dec 2024

- **Conducted comprehensive SIRI (Smart Industry Readiness Index) assessments** for numerous clients across diverse sectors, including Fast-Moving Consumer Goods (FMCG), manufacturing, food processing industries. These assessments provided detailed insights into organizational readiness, technology adoption levels, and strategic recommendations to accelerate digital transformation and optimize operational efficiency.
- **Developed and executed** Industry 4.0 deployment roadmaps, aligning automation solutions with commercial objectives and market requirements.
- **Led cross-functional teams** in delivering ready-to-deploy automation solutions, cutting time-to-market by 65% and increasing sales by 40%.
- **Defined strategic commercialization roadmaps**, resulting in three new patents in robotic palletizing, case erection, and welding technologies.
- **Built comprehensive business cases for technology investments**, conducting competitive analyses, risk assessments, and tracking value realization.
- **Applied robust techno-economic evaluation methodologies** to assess technology ROI and ensure deployment feasibility.

Robotics Lab Manager & Lecturer, Prince Mohd bin Fahd University

Jun 2021 - Nov 2023

- **Digital Transformation in Robotics:** Managed R&D and deployment initiatives in robotics and additive manufacturing, driving digital integration between academia and industry.
- **Digital Transformation in Higher Education:** Lead the development of Aramco’s National IT Academy’s efforts to implement their program “AI Practitioner Diploma” and lectured for their “Introduction to Computer Module”.
- **Innovation & Commercialization:** Provided strategic technology consulting for automation projects, facilitating successful commercialization of digitally-driven, student-led innovations.
- **Capability Development:** Designed and executed comprehensive training programs in robotics, AI-powered automation, and digital CAD modeling, enhancing organizational digital capabilities.
- **Project Leadership & Digital Collaboration:** Led 12 digitally-enabled senior design projects, achieving high prototype success rates and notable satisfaction improvements through integrated collaboration with design engineers, production teams, and supply chain partners.
- **Digital Compliance & Optimization:** Ensured adherence to cybersecurity, safety, and regulatory standards in robotics automation, while employing data-driven analysis for system performance optimization and continuous digital process improvement.

CORE SKILLS & EXPERTISE

- Technology Deployment & Commercialization
- Project Management & Agile Methodologies
- Techno-Economic Evaluation & Business Strategy
- Industrial Automation & Robotics
- Cross-Functional Leadership & Stakeholder Engagement
- Intellectual Property (IP) Strategy & Licensing
- Manufacturing Process Optimization & Quality Assurance
- Data-Driven Decision-Making & Technology ROI Assessment

EDUCATION

Bachelor of Science in Computer Engineer

Sep 2015 - May 2020

Prince Mohd. bin Fahd University

ADDITIONAL INFORMATION

- **Languages:** Native Arabic & English Speaker.
- **Availability:** Immediate.
- **Visa Status:** Currently In the Kingdom with Transferrable Iqama.