

Arash Marashian

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Professional Summary

Project Engineer at Wärtsilä Marine (Voyage Services) delivering on-time, reliable handovers for cruise/voyage systems. I lead by enabling others—cross-training, clear task models, and lightweight automation—so the team moves faster with fewer errors. Strong blend of systems integration and software/data (Python, Linux, Git) with hands-on knowledge of marine interfaces and networks. Ready to step into Team Lead, Project Engineering, to scale predictability, team capability, and business outcomes.

Core Competencies

- Workload & capacity planning
- Project engineering & on-time delivery
- Cross-functional collaboration & stakeholder management
- Continuous improvement
- Training & knowledge sharing
- Problem solving & analytical decision-making
- Technical direction & solution/code reviews
- Clear communication & documentation

Professional Experience

Project Engineer, Customer Delivery — Fleet Optimization

Wärtsilä Marine, Voyage Services, Turku | 2024–Present

- **End-to-end delivery:** Provisioning, sensor calibration, DQC, draft calculation, and handover. Support TC and on-site / off-site commissioning needs.
- **Leadership & coordination:** Introduced the shared *TC Log List* and handover cadence for Project Engineering, giving PM a single source of truth and improving visibility, ownership, and predictability of delivery.
- **Mentoring & enablement:** Onboarded and coached colleagues and a summer trainee; delivered a **Databricks** training session to improve team performance and standardize workflows.
- **Process automation:** Built a **NMEA tag** checker and a **BARK/ARK missing-tag** validator, cutting manual checks from hours to minutes and reducing error risk in documentation and data validation.
- **Quality & reliability:** Co-designed, with the DPD team, a **data monitoring** approach to detect data loss early and prevent schedule slips and rework (still in progress).
- **Cost & time savings:** Devised a safe **remote recovery** method for a device-access issue, avoiding an on-site dispatch and reducing project cost and delay.
- **Platform & tooling improvements:** Optimized engineering notebooks and **migrated to Databricks** to improve performance, governance, and collaboration; authored execution guides to standardize practice.
- **Stakeholder collaboration:** Partnered with Project Management and Support team to align scope, mitigate risks, and keep customer commitments; communicated clearly with internal and external stakeholders.
- **Technical stack:** Python, Databricks, Linux, Kubernetes, GitHub, AutoCAD; IT & network fundamentals; NMEA; electrical circuits; documentation and version-control best practices.

Researcher, Laboratory of Process & Systems Engineering

Åbo Akademi University, Turku, Finland | 2023–2024

- Marine energy systems optimization in **CPT & INDECS** projects; integrated empirical data with computational models; applied dynamic programming and metaheuristics.
- Delivered project reports, consortium presentations, and cross-institution collaboration; strengthened communication and stakeholder management.

Research Engineer & Workshop Manager (DSC Lab)

Persian Gulf University, Bushehr, Iran | 2017–2023

- Led and executed projects in robotics, autonomous vehicles, and control; organized workshops on automation and control engineering.
- Developed algorithms for path planning & tracking (MPC); performed practical system identification and embedded-systems design.

Education

Ph.D. (cand.), Process Control

Åbo Akademi University, Turku, Finland — Process Control Laboratory 2023 – Present

Projects: *CPT*, *INDECS*; status: *Ready to defend*.

M.Sc., Control Engineering

Persian Gulf University, Iran — GPA: 18.32/20 2019 – 2022

Thesis: *Path Planning, Reference Generation, and Optimal Control of an Autonomous Motion System*.

B.Sc., Electrical Engineering

Persian Gulf University, Iran — GPA: 17.5/20 2015 – 2019

Technical Skills

- Python; MATLAB/Simulink
- Databricks
- Linux; Kubernetes
- Git/GitHub
- AutoCAD; Microsoft Office
- NMEA; OPC UA
- Sensor calibration; electrical circuits & drafting
- IT/network fundamentals
- ETL & data pipelines

Languages

- English — Professional proficiency (IELTS 6.5: L 6.5, R 6, W 6, S 7)
- Finnish — Elementary (Aloitin suomen kielen opiskelun)
- Persian — Native

Awards & Honors (selected)

- Top Postgraduate Researcher Award — Persian Gulf University (2021)
- Ranked 1st in M.Sc. cohort; 1st in B.Sc. cohort

Selected Publications

- [Marashian, Arash](#), et al. "Optimizing Cruise Ship Speed Incorporating Weather and Hotel Load Factors." 2024 European Control Conference (ECC). IEEE, 2024.
- [Marashian, Arash](#), and Abolhassan Razminia. "Mobile robot's path-planning and path-tracking in static and dynamic environments: Dynamic programming approach." *Robotics and Autonomous Systems* 172 (2024): 104592.

References

Available upon request.