



Kashif Kamran Toor

Engineering specialist with more than two decades of experience in offshore structural design, advanced simulation, and technology development for offshore wind and energy infrastructure. Proven track record at Ørsted, Vattenfall, and Rambøll delivering foundation design, fatigue assessment, and structural integrity solutions for large-scale offshore assets. Recognised for combining deep FEA expertise with digital innovation, including AI-driven engineering tools that improve concept evaluation, cost estimation, and design optimisation. A focused, analytical, and highly organised professional who naturally assumes the role of quality assurer in complex projects.

Experience

2019–25 Lead Specialist — Vattenfall

- Technology development for offshore wind foundation design
- AI implementation for foundation cost estimation
- Advanced shell buckling analysis including pile-soil interaction using FEA
- Tech. support to O&M for structural integrity (advanced FEA)

2010–19 Senior FEA Specialist — Ørsted

- Foundation design for offshore wind turbines
- Design Briefs for project certification
- Fatigue design of tubular / plated joints by FEA
- Design review and quality check of FE analyses

2007–09 Project Engineer — Rambøll Oil and Gas

- Structural analysis of jacket substructures
- Reassessment of various platforms in the North Sea
- Clients: DONG Energy, Mærsk Oil and Gas, Amerada Hess, ConocoPhillips, Samsung Heavy Industries

2003–06 Design Engineer — TRACS HDD Denmark / Pedem Ltd. UK

- Design and development of drilling tools for various clients in Europe / US

Publications / Conferences

2024 Fatigue calculation at hot spot in cope-hole welded details using finite element analysis. Toor, K.K., Lotsberg, I., 2024.

Procedia Structural Integrity (57), 772–784. doi: 10.1016/j.prostr.2024.03.083.

2022 Driving-induced fatigue damage calculation for flange and MP attachments.

Speaker at 10th International Conference Offshore Foundation, Bremen.

2020 Support / Substructure design and optimisation using ANSYS / LS-DYNA.

Speaker at Institution of Mechanical Engineers' seminar.

2017 Assessment of fatigue strength of welded connections in thick plates. Toor, K.K. / Lotsberg, I. (DNV).

Proceedings of the ASME 2017 36th International Conference on Ocean, Offshore and Arctic Engineering, OMAE2017-61143.

2005 Finite element analysis of drilling-jar connection.

17th Nordic Seminar on Computational Mechanics, NSCM17, Stockholm.

2002 Heat effects on offshore structures.

Publication in ISSM 2002 in collaboration with ISTECS Europe, Berlin.

Affiliations

ASME Member since 2002 (American Society of Mechanical Engineers)

Languages

English · Danish · Urdu · Punjabi

Education

• Technology and Innovation Acceleration Program (2023)

[MIT-xPRO](#)

• M.Sc. Oil and Gas Technology (2003)

[Aalborg University Esbjerg, Denmark](#)

• B.Sc. Mechanical Engineering (2000)

[University of Engineering & Technology, Lahore, Pakistan](#)

Skills

- ANSYS APDL / Workbench
- LS-DYNA
- ROSAP (Ramboll Offshore FEA Tool)
- HAWC2 / OpenFAST — aeroelastic codes
- Autodesk Inventor, SolidWorks
- Python (data science)
- AI & Machine Learning
- Flask / Docker — web-app deployment
- Git
- MS Office Tools
- Power BI

Expertise

