CV - 2025

PERSONAL INFORMATION

Last name, first name:	Sakaris, Christos	
Birthdate:	25.06.1985	Gender: Male
Nationality:	Greek	
Researcher unique identifiers:	https://orcid.org/0000-0002-7211-4520 https://scholar.google.com/citations?user=P99cgBwAAAAJ&hl=el	
Personal website:	https://no.linkedin.com/in/sakariscs	

HIGHER EDUCATION/OTHER EDUCATION

Year	Degree	Name of institution, country	Details
2018	Doctor of Philosophy (Ph.D.)	Department of Mechanical and Aeronautical Engineering, University of Patras, Greece	*PhD Dissertation:* Random vibration based precise localization of single and multi-site structural damage via stochastic functional models
2009	Diploma (Master equivalent)	Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece	*Diploma Thesis*: Multi-objective optimization of the size of a cam via Genetic Algorithms

CURRENT/ PAST POSITIONS

Year	Position/employer/country
From September 2023	Position: Researcher / Scientist
	Employer: Norwegian Research Centre (NORCE), Grimstad, Agder, Norway
	Project: Innovative storage technology and operations in hydropower - STOR-HY, Funded by: European Union's Horizon 2024 research and innovation programme (grant no. 101172905), Role: participant Outcome: SHM in metallic large gas tanks and valves
	Project: Effect of vibration measurement for condition monitoring of wooden posts, Funded by: Research Mobilization Agder (grant no. 961571), Role: manager Outcome: Exploring the vibration measurement value for real-time condition monitoring of wooden poles and testing LoRa communication
	Project: Holistic and Integrated Asset Management for Europe's RAIL System - IAM4RAIL, Funded by: European Union's Horizon 2022 research and innovation programme (grant no. 101101966), Role: participant Outcome: Estimation of the remaining useful life of a steel bridge

	Project: Unleashing the sustainable value creation potential of offshore ocean aquaculture - SusOffAqua, Funded by: Research Council Norway (grant no. 328724), Role: participant Outcome: Damage detection in the tendons supporting the nets of Ocean Farm 1 under varying environmental conditions
	Project: Ski Lift Monitoring System - Structural monitoring of ski-lifts, Funded by: Regional Research Funds (RFF) Agder (grant no. 349843), Role: manager Outcome: Structural state characterization in the steel masts of a ski-lift
	Project: Remote Inspection of Wooden Utility Poles - RIWUP, Funded by: Research Council Norway (grant no. 281018), Role: participant Outcome: Detection of rot in wooden poles
September 2021-August 2023	Position: Postdoctoral Researcher
	Employer: Norwegian Research Centre (NORCE), Grimstad, Agder, Norway
	Project: Analytics for asset Integrity Management of Wind farms - AIMWind, Funded by: Research Council Norway (grant no. 312486), Role: participant Outcome: Damage detection in the mooring lines (chains and fiber lines) of spar and semi-submersible floaters supporting Floating Offshore Wind Turbines (FOWTs) under varying environmental conditions
November 2019-November 2020	Position: Postdoctoral Research Fellow
	Employer: Liverpool John Moores University, Liverpool, United Kingdom
	Project: Adaptation and implementation of floating wind energy conversion technology for the Atlantic Region – ARCWIND, Funded by: Interreg Atlantic Area, European Regional Development Fund (grant no. EAPA 344/2016) and the European Union's Horizon 2020 research and innovation programme (Marie Skłodowska-Curie grant no. 730888), Role: participant Outcome: Damage detection, identification, quantification in the tendons of a floater supporting a FOWT under fixed and varying environmental conditions
November 2009-July 2018	Position: Assistant
	Employer: University of Patras, Patras, Greece
	Outcome: Research on scientific subjects, developing laboratory structures and conducting experiments on them, analysis of vibration signals based on the proper use of electronic equipment, writing scientific papers
February 2007-July 2007	Position: CAD Designer
	Employer: Athanasios Kolotsios - Technical office, Thessaloniki, Greece
	Outcome: Design of floor plans with AutoCad

SUPERVISOR ROLE

Year	No. of people	Place/country
2021-today	3 undergraduates 2 graduates	NORCE, Norway
2010-2014	5 undergraduates	University of Patras, Greece

TEACHING ACTIVITIES

Year	Teaching position – topic, name of university/institution/country
2010-2014	Position: Laboratory instructor
	Employer: Department of Mechanical and Aeronautics Engineers, University of Patras, Patras, Greece
	Subjects: Presentations and experiments for undergraduate courses about mechatronic systems, electrical circuits & electrical machines, systems and automatic control

ADDITIONAL ACTIVITIES

Year	Name of networks
From 2016	Reviewer for scientific journals including Mechanical Systems and Signal Processing, Structural Health Monitoring, Journal of Systems and Control Engineering, Journal of Marine Engineering and Technology, Wind Energy,etc.

MEMBERSHIPS OF NETWORKS

Year	Name of networks
From 2009	Technical Chamber of Greece

TRACK RECORD

JOURNAL PUBLICATIONS

1. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Vibration-based damage precise localization in 3D structures: Single versus multiple response measurements**", *Structural Health Monitoring*, Vol. 14, No. 3, pp. 300-314, 2015.
2. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**A time series generalized functional model based method for vibration-based damage precise localization in structures consisting of 1D, 2D and 3D elements**", *Mechanical Systems and Signal Processing*, Vol. 74, pp. 199-213, 2016.
3. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Random-vibration-based damage detection and precise localization on a lab-scale aircraft stabilizer structure via the generalized functional model based method**", *Structural Health Monitoring*, Vol. 16, No. 5, pp. 594-610, 2017.
4. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Vibration-based damage localization and estimation via the stochastic Functional Model Based Method (FMBM) - an overview**", *Structural Health Monitoring*, Vol. 17, No. 6, pp. 1335-1348, 2018.
5. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Multi-site damage precise localization via the random vibration Functional Model Based Method:**

Formulation & concept validation", *Mechanical Systems and Signal Processing,* Vol. 160, 107880, 2021

6. Sakaris C.S., Bashir M.B., Yang Y., Michailides C., Wang J., Sakellariou J.S., "**Diagnosis of damaged tendons on a 10 MW multibody floating offshore wind turbine platform via a response-only Functional Model Based Method**", *Engineering Structures*, Vol. 242, 112384, 2021.
7. Sakaris C.S., Bashir M.B., Yang Y., Michailides C., Wang J., Sakellariou J.S., Li C., "**Structural health monitoring of multibody floating offshore wind turbine tendons under varying environmental and operating conditions**", *Renewable Energy*, Vol. 179, pp. 1897-1914, 2021.
8. Anastasiadis N., Sakaris C.S., Schlanbusch R., Sakellariou J., "**Vibration-based SHM in the synthetic mooring lines of the semi-submersible OO-Star wind floater under varying environmental and operational conditions**", *Sensors*, Vol.24, No. 2, p. 543, 2024.
9. Wen X., Sakaris C., Schlanbusch R., Ong M.C., "**Numerical modelling and analysis of tendon failures in nets of semi-submersible fish cages**", *Ocean Engineering*, Vol. 325, 120768, 2025.

CONFERENCE PUBLICATIONS

1. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Damage detection and precise localization via a vibration based functional model method: Application to a 3D truss structure**", *Proceedings of the 6th European Workshop on Structural Health Monitoring (EWSHM)*, Dresden, Germany, 2012.

2. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**How Many Vibration Response Sensors for Damage Detection & Localization on a Structural Topology? An experimental exploratory study**", *Proceedings of the 10th International Conference on Damage Assessment of Structures (DAMAS)*, Dublin, Ireland, 2013. Also in *Key Engineering Materials*, Vol. 569-570, pp. 791–798, 2013.

3. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Precise vibration-based damage localization in 3D structures consisting of 1D elements: Single vs multiple response measurements**", *Proceedings of the 7th European Workshop on Structural Health Monitoring (EWSHM)*, Nantes, France, 2014.

4. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**A generalized functional model based method for vibration-based damage precise localization in 3D structures**", *Proceedings of the 10th International Conference on Damage Assessment of Structures (DAMAS)*, Gent, Belgium, 2015. Also in *Journal of Physics: Conference Series*, Vol. 628, 2015.

5. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Vibration-based damage precise localization on a lab-scale aircraft structure via the statistical functional model based method**", *Proceedings of the 8th European Workshop on Structural Health Monitoring (EWSHM)*, Bilbao, Spain, 2016.

6. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Vibration-based damage localization and estimation via the stochastic Functional Model Based Method (FMBM) – an overview**", *Proceedings of the 11th International Workshop on Structural Health Monitoring (IWSHM)*, Stanford, USA, 2017.

7. Sakaris C.S., Sakellariou J.S. and Fassois S.D., "**Vibration-based multi-site damage precise localization via the functional model based method**", *Proceedings of the X International Conference on Structural Dynamics*, Rome, Italy, 2017. Also in *Procedia Engineering*, Vol. 199, pp. 2072-2077, 2017.

8. Yang Y., Bashir M.B., Sakaris C.S, Loughney S., Wang J., Michailides C., Li C., "**Tuned mass damper effects on the tendon responses of a novel 10 MW multi-body floating offshore wind turbine platform**", *Proceedings of the 4th International Conference on Renewable Energies Offshore (RENEW),* Lisbon, Portugal, 2020.

9. Sakaris C.S., Schlanbusch R., "**Analytics for asset integrity management in wind farms (AIMWind) : Low-cost solutions for turbine structural health monitoring**", *Proceedings of the Science Meets Industry: Offshore Wind Energy seminar*, Kristiansand, Norway, 2021.

10. Sakaris C.S., Schlanbusch R., "**Damage detection and quantification in the mooring lines of floating offshore wind turbines though statistical methods**", *Proceedings of the Science Meets Industry – SMIBergen2022 conference*, Bergen, Norway, 2022.

11. Sakaris C.S., Schnepf A., Schlanbusch R., Ong M.C., "**A comparative study on damage detection in the delta mooring system of spar floating offshore wind turbines**", *Proceedings of the 16th European Workshop on Advanced Control and Diagnosis (ACD) conference*, Nancy, France, 2022. Also in: Theilliol, D., Korbicz, J., Kacprzyk, J. (eds), *Studies in systems, decision and control: Recent developments in model-based and data-driven methods for advanced control and diagnosis*, Vol. 467, pp 283–293, Springer.

12. Sakaris C.S., Schlanbusch R., "**Damage detection in the mooring system of spar floating offshore wind turbines through statistical methods**", *Proceedings of the 20th European Energy Research Alliance (EERA) DeepWind conference*, Trondheim, Norway, 2023.

13. Sakaris C.S., Schlanbusch R., "**Analytics for Asset Integrity Management in Wind farms (AIMWind) : Damage Detection in the Fibre Rope Mooring Lines of the Semi-Submersible OO-STAR Wind Floater**", *Proceedings of the Science Meets Industry: Offshore Wind Energy seminar*, Fevik, Norway, 2023.

14. Sakaris C.S., Schlanbusch R., Nygaard T.A., Sakellariou J.S., Tutkun M., "**Statistical times series based damage detection in the fiber rope mooring lines of the semi-submersible OO-STAR wind floater**", *Proceedings of the 62nd IEEE Conference on Decision and Control (CDC)*, Marina Bay Sands, Singapore, 2023.

15. Sakaris C.S., Anastasiadis N., Schlanbusch R., Kandukuri S., "**Structural Health Monitoring of synthetic mooring lines for semi-submersible wind floaters under varying environmental conditions**", *Proceedings of the 21st European Energy Research Alliance (EERA) DeepWind conference*, Trondheim, Norway, 2024. Also in: *Journal of Physics: Conference Series*, 2875, 012032, 2024.

16. Sakaris C.S., Schlanbusch R., "**Detecting damages in chain and synthetic mooring lines of floating wind turbines**", *Proceedings of the 3rd WindEurope Annual Event conference*, Bilbao, Spain, 2024.

17. Konstantinou X., Kritikakos K., Lee C.F., Sakaris C., Sakellariou J., Schlanbusch R., Ong M.C., "**Vibration-based structural health monitoring of the mooring lines in a floating offshore wind turbine under varying environmental conditions: NN vs STS based methods**", *Proceedings of the 31st International Conference on Noise and Vibration Engineering (ISMA)*, Leuven, Belgium, 2024.

18. Sakaris C., Sakellariou J., Yang Y., Bashir Mu., Schlanbusch R., "**10MW Floating offshore wind turbine: Damage detection along with damage magnitude estimation in the tower-base connection under varying operating conditions**" , *Proceedings of the 2nd Olympiad in Engineering Science (OES)*, Stavanger, Norway, 2025.