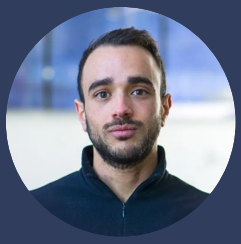
Dr. Nick Eleftheroglou



+[redacted]

LinkedIn Google Scholar

Expertise

My research focuses on Sustainable AI for Diagnosis, Prognosis, and Health Management of structures and engineering systems. My aim is to develop novel physics-informed AI models that are able to reduce AI carbon emissions, while improving accuracy. To that end, my research interests are in the areas of data analysis, diagnosis, and prognosis of systems and structures utilizing machine learning models, stochastic models, Bayesian statistics, and health/condition monitoring techniques. In recent years, I have been a pioneer in the field of adaptive prognostics for composite structures by developing novel stochastic models.

Professional Experience

Assistant Professor,
Delft University of Technology
03/2022 – present

Business Consultant, *ORTEC*
04/2022 – 02/2023

Postdoctoral Researcher,
Delft University of Technology
02/2020 – 01/2021

Education

Doctor of Philosophy, Cum Laude, *Faculty of Aerospace Engineering, Delft University of Technology*
02/2016 – 01/2020

Diploma, Cum Laude (8.93/10), *Department of Mechanical Engineering and Aeronautics, University of Patras*
09/2010 – 11/2015

Publications

Journal Papers (10)

Conference Papers (12+)

Book Chapters (2)

Invited Seminars

Drexel University, Mechanical Engineering and Mechanics, Philadelphia, USA, *Prognostics for Remaining Useful Life Analysis of Composite Structures.*

Prognostics Center of Excellence NASA, California, USA, *Online Remaining Useful Life prognosis in composite materials based on health monitoring data & stochastic modeling.*

RISE Research Institutes of Sweden,
Prognostics: The Heart of Predictive Maintenance

Air France-KLM, Amsterdam, Netherlands,
AI for Aviation Sustainability: Green AI

Organizations

ASME (The American Society of Mechanical Engineers), *Reviewer*

PHM Society (Prognostics and Health Management Society), *Reviewer*

Elsevier Journal, *Reviewer*

IEEE Journal, *Reviewer*

11th Annual Conference of the Prognostics and Health Management Society,
Conference Management member

Awards

TU Delft Postdoc Research Scholarship 'Adaptive Prognostics', Excellence of Science

TU Delft Research Scholarship, *'Prognostics of composite structures under fatigue loading', Excellence of Science*

Euro bank EFG Award

National Foundation Scholarships (I.K.Y.) for outstanding performance

TU Delft Postdoc Research Scholarship,
'Adaptive Prognostics', Excellence of Science