Curriculum Vitae

Personal Information

Name and Surname	Ioannis Nikiforakis
Address	10 Burgess Ln, Stony Brook NY 11790, USA
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Portfolio	ioannikiforakis.github.io

Education

2017 - 2024	Ph.D. in Mechanical Engineering Stony Brook University Dissertation: Understanding the Role of the Internal Combustion Engine for a Hybrid Solid Oxide Fuel Cell Power Generation System
2014 - 2017	M.Sc. Sustainable Energy Technology Delft University of Technology Thesis: Determination of Fatigue Assessment of Monopile–Based Offshore Wind Turbines through Fidelity Quantification
2007 - 2014	B.Eng. & M.Eng. in Mechanical Engineering National Technical University of Athens Thesis: Net Zero Energy Buidlings: A Full Review

Professional Experience

05/2022-12/2024 & 05/2021-08/2021 & 05/2018-12/2020	Research Assistant-SUNY Research Foundation
08/2021-05/2022 & 01/2021-05/2021 & 08/2017-05/2018	Teaching Assistant-Stony Brook University
06/2013-08/2013 & 06/2012-08/2012	Summer Intern-HARAMIS BROS S.A.

Language Skills

English	Cambridge Proficiency (CPE), IELTS
French	DELF A1, DELF A2
Greek	Mother Tongue
Dutch	Elementary
Mandarin	Elementary

Computer Skills

- CONVERGE CFD, Tecplot 360
- ANSYS Fluent, Chemkin, EnSight
- ParaView
- Bladed
- AutoCAD
- Aspen Plus
- Microsoft Office Suite

Coding in MATLAB, Python, C/C++

Publications in Refereed Journals & Conference Proceedings

Nikiforakis I, Mamalis S, Assanis D. Understanding Solid Oxide Fuel Cell Hybridization: A Critical Review. Applied Energy, 377:124277. January 2025. https://doi.org/10.1016/j.apenergy.2024.124277

Nikiforakis I, Guleria G, Koraiem M, Assanis D, Collie C, Costa T, Kute P, Shkolnik A. Understanding Pre-Chamber Combustion Performance in a Closed-Cycle Model of a Novel Rotary Engine. SAE Technical Paper 2022-01-0396. 2022. https://doi.org/10.4271/2022-01-0396

Nikiforakis I, Ran Z, Sprengel M, Brackett J, Babbitt G, Assanis D. Investigating realistic anode off-gas combustion in SOFC/ICE hybrid systems: mini review and experimental evaluation. International Journal of Engine Research. December 2021. https://doi.org/10.1177/14680874211058324

Projects

- Wake Investigation in Sunrise Wind at Long Island, NY (Ørsted, Stony Brook University)
- Investigating the viability of the Rotary "X" Engine in UAVs for U.S. Air Force (LiquidPiston Inc., Stony Brook University)
- Innovative Natural-gas Technologies for Efficiency Gain in Reliable and Affordable Thermochemical Electricity-generation (ARPA-E, Stony Brook University)
- Offshore Wind Support Structure Analysis for Installation at the North Sea (TU Delft)
- Technical, Financial & Spatial Evaluation of Wind Energy in Milos, Greece (TU Delft)

Awards

- Admitted 2nd overall to the Mechanical Engineering School of National Technical University of Athens (2007)
- Gerondelis Foundation Graduate Study Scholarship (2023)
- Institute for Advanced Computational Science Young Writer's Award (2024)