

Nima Bahrami Z.

Contact Information	Leeuwarden NL	Tel: +31657842647 E-mail: n.bahraami@gmail.com	Other Links: GitHub LinkedIn X Web: Nimabahrami.github.io
Research Interests	I am interested in the intersection of game theory, optimization, and machine learning to improve decision-making and market mechanisms in renewable energy systems. My work explores how probabilistic modeling and statistical methods can enhance the resilience and efficiency of hybrid renewable energy systems. Additionally, I am keen on new economic frameworks for energy markets, such as blockchain-based energy trading and decentralized energy management.		
Experience	Energiek Reahus Province Friesland	Led a team of four to solve a Tri-partied challenge of micro grid deployment in Reahus. Developed Game-theoretic model to maximize the social welfare of migrating to islanded energy	
	Freelance Code Interpreter	Providing support with interpreting scientific code (Numerical modeling Optimization) for diversified students Python and Matlab	
	Allame University Merila	Led a research project on thermal comfort assessment in office buildings, utilizing data science techniques to analyze and interpret temperature and humidity data collected from smart sensors using Python. Developed web-application for thermal comfort estimation based on analysis of energy structure of three districts of Tehran toward achieving thermal comfort through optimal strategy	
	Merila Knowledge Enterprise	Developed many features for a telemedicine application through production level python code (FastAPI TensorFlow); designed RDBMS for specific machine learning based features of the application e.g., patient lab results	
	University Tubitak IUST	Investigated the feasibility of blockchain technology for decarbonization of rural electricity, evaluated potential blockchain platforms for energy trading , grid optimization, and carbon reduction, benchmarking their performance against conventional energy management solutions.	
	Tehran Municipality IUST	Conducted experiments and collected data to assess the feasibility and efficiency of different approaches to generating electricity from construction debris.	
Education	M.Sc. <i>University of Twente</i> 2024 -2025	Energy management Thesis: Pricing Mechanisms for Battery Sharing	
	M.Sc. <i>Iran University of Science and Technology</i> 2019-2021	Mechanical Engineering Focus Area: Energy Systems, Optimization , Mathematical modeling of Hybrid Renewable Energy Systems Thesis: Design and optimization of a hybrid multi-generative renewable energy system and predict its sustainability using artificial neural network (ANN)	
	B.Sc. <i>University of Guilan</i> 2013-2018	Mechanical Engineering Focus Area: Mechatronics, Thesis: Design and manufacture a 3-DOF camera slider for shooting time-lapse videography with ability to focus on an object	
Publication	Ghandehariun, S., Ghandehariun, A.M., Bahrami Ziabari , N. (2024), Complementary Assessment and Design Optimization of a Hybrid Renewable Energy System Integrated with Pumped Hydro Energy Storage with Natural Intake. Renewable Energy		
	Ghandehariun, S., Ghandehariun, A.M., Bahrami Ziabari , N. (2023), Performance prediction and optimization of a hybrid renewable-energy-based multigeneration system using machine learning. Energy		
	Bahrami Ziabari , N., & Ghandehariun, S. (2021). Investigating the Social Acceptance of Integrating Wind Turbines with Ecotourism Residences: A Case Study of Iran. In The 29th Annual International Conference of the Iranian Society of Mechanical Engineers (ISME)		
	Bahrami Ziabari , N., & Ghandehariun, S. (2022). Economic Assessment of Solar-based Hydrogen for Methanol Production. Energy Equipment and Systems, 8(3), 263-273		
Skills	Python (Advanced) , Jupyter, Machine Learning , Optimization (Proficient in MINLP / Bi-Level Robust/Stochastic), SQL , Matlab, HTML, CSS, Visualization (StreamLit , Bokeh),		
	Certificates	Awards	
	Data Scientist (Associate), Advanced Optimization , Energy Markets of Today, Advanced Statistics (Google), HOMER, PVSyst	→ 8000 GBP ICMA Award → 5000 EUR Scholarship University of Twente → x2 Gold Medal Speed Skating Iran → x1 Provincial Squash Champion	