

PERSONAL INFORMATION

Victor Mihai



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Sex Male | Date of birth | Nationality Romanian

WORK EXPERIENCE

03/2023 – present

Senior Engineer/Manager/Owner Navdesign Research & Technology SRL.

- Quotation for design activities
- Technical support for P&ID, HVAC and Automation activities
- Preparing HVAC complete packages (including equipment purchasing support)
- Preparing P&ID, room layouts etc - complete package
- Quality control of basic design documentation
- Technical support to Shipyards
- Management

06/2021 – 03/2023

Project Manager/Basic Design Senior Engineer at VARD Engineering Constanta. Summary of roles and activates as listed below:

- Coordination and Technical support (HVAC, automation) for Basic Design projects
- Quotation for design activities, planning
- Equipment purchasing (Request for quotation, technical analysis, TSS for contract)
- Preparing basic design documentation for HVAC system
- Quality control of basic design documentation
- Technical support to Shipyards

08/2020 – 10/2023 (part time)

Technical Expert - ship systems and equipment,

European Project: Integrated system for complex environmental research and monitoring in the Danube River area, REXDAN, SMIS code 127065, “Dunarea de Jos” University, Galati

- Technical specification for supply of the Research Vessel
- Technical specification for supply of the mooring pontoon
- Quality control for the project from Owner side (referring to equipment and systems)
- Technical support and clarification for suppliers

10/2020 – 06/2023 (part time)

Teaching Assistant at Faculty of Naval Architecture, “Dunarea de Jos” of Galati University

- Laboratory/Teaching the students – Integrated systems for design of naval piping systems (preparing of the 3D model, checking functionality, improving arrangement to reduce the costs, preparing of production documentation)

03/2020 – 06/2021

Ships Tender Coordinator at VARD Shipyard Braila. Summary of roles and activates as listed below:

- Technical support for HVAC system at detail design
- Technical analysis of equipment specifications
- Preparing PI documentation for HVAC, piping and foundations
- Trainer for piping department

08/2005 – 03/2020

Project Manager/Technical coordinator/Senior Mechanical Engineer at Ship Design Group Galati. Summary of roles and activates as listed below:**Project Coordinator and Technical Coordinator:**

- Project coordinator (for all disciplines – concept, basic and detail design) – 5 projects
- Coordination and Technical support (ref. Piping & Machinery / HVAC) for Basic Design projects (more than 15 projects)
- Quotation for design activities (calculation of the necessary man hours)

- Preparing Drawings list, design activities, planning
- Coordination of disciplines inside the project
- Project progress report
- Create strategies to reach the miles stones

Initial design:

- Initial calculation/estimation for equipment and piping systems (including HVAC)
- Electrical power calculation/estimation
- Outline Specification, Building Specification, Main equipment list and specifications
- Weight estimation/calculation for concept design

Basic design activities:

- Managing the technical communication with Class, Owner, Yard, equipment makers
- Managing the comments from Yard, Owner, Class
- Interpretation of Class and IMO Rules & Regulations related to class notation of the vessel
- Technical specification for equipment purchasing and evaluation of equipment offers
- P&IDs and calculation for all piping systems. Functionality description.
- Description and logical scheme for IAS system (control and monitoring)
- Arrangements and calculation for HVAC (GA, heat balance calc., air distribution diagram)
- Creation of dedicated drawings like
- CAD drawings for: Escape routes plan, Freeboard/Damage Control Plan, Fire subdivision plan, ER arrangement, ER ventilation, Hazardous Plan etc.

Detail design and production information

- Preliminary arrangements of technical spaces
- Design review and technical support to the engineering team
- QC: combination drawings, ISO's, spools, MTO
- Pipes routing and preparing production information documentation

Other:

- Team member of inclining tests
- Team member for commissioning at harbour and sea trials
- Training various teams of engineers on basic design for P&ID and HVAC systems.

01/2004 – 08/2005 Chief of Automation and navigation department/ Project Manager at River Administration of Lower Danube, Galati

- Coordination and technical support for vessels modernization (2 vessels)
- Coordination of the team for implementation of the modern navigation systems, including European River Information Service
- Project Manager of “Integrated informatic system”

01/2000 – 01/2004 Electro-mechanical Engineer at Damen Shipyard Galati

- Routing of piping and electrical systems, in 3D model using Tribon
- Detail design drawings (Combination drawings, ISO's, Penetration etc)
- Preparing electrical diagrams for shipyard modernisation

Main projects type for reference (see Annex 1 for more information):

Offshore renewable vessels (2023, 2024)	OSC& Pipelay Vessel
Cable Laying Vessel (2020, 2022,2023, 2024)	Shallow Draught Survey Vessel
Wind farm Support vessel (2021- 2024)	River Survey Vessel
Passenger vessel (2023)	Offshore Support Vessel
Wind farm Support vessel (2021, 2023)	Mega yacht 120m
Multipurpose Tugboat	Survey Vessel
Oil Residues Collecting Tanker	Waste Collection and Treatment Vessel
Polar Condensate Oil Tanker	Oil Spill Assistance Vessel
Polar Logistic Vessel	Cutter Suction Dredger
Shallow Draught Multipurpose Workboat	Shallow Draught Ice Class Tug
	AHTS 180TBP/ 120TBP
	Chemicals tanker

Classification societies

BV, DNV GL, ABS, Lloyd's Register, Russian Maritime Register of Shipping, NKK (Nippon Kaiji Kyokai)

EDUCATION AND TRAINING

2020 – present

PhD student, “Dunarea de Jos” University, Galati: “Research of naval systems for improving ventilation in engines room”

2000 – 2001

Master’s degree in Naval Architecture & Electrical Engineering, “Dunarea de Jos” University
Specialisation: Informatic systems for transport and conversion of electrical energy

1994 – 1999

Bachelor’s degree in Naval Architecture & Electrical Engineering, “Dunarea de Jos” University
Specialization: Electro-Mechanical Engineering

Training

2010 Microsoft Project course at CODECS Romania

2009 Project Management at CODECS Romania (six months course and certification)

RESEARCH AND ARTICLES PUBLISHED

2018 – 2020: GRENDL – European research project: retrofitting solutions for diesel engines in order to meet the latest UE exhaust gas requirements- Stage V and pure LNG propulsion for inland vessels (<http://www.interreg-danube.eu/approved-projects/grendel>)

2023: Article published in the journal Marine Science and Engineering, “*CFD Analysis and Wind Tunnel Experiment for Ventilation Ducts with Structural Elements Inside*”.
<https://www.mdpi.com/2077-1312/11/2/371>

2022: Article published in Fascicle XI, The Annals of “Dunarea de Jos” University of Galati *Main requirements for ventilation of different rooms on the ships*

2022: Article published in the journal Inventions 2022, “*Improving the Ventilation of Machinery Spaces with Direct Adiabatic Cooling System*”.
<https://www.mdpi.com/2411-5134/7/3/78>

2021: Article published in the journal Inventions 2021, 6(3),55, “*An Overview of the Ship Ventilation Systems and Measures to Avoid the Spread of Diseases*”
<https://doi.org/10.3390/inventions6030055>

2020: Article published in Fascicle XI, The Annals of “Dunarea de Jos” University of Galati- “*Design aspects for ventilation of engine rooms*”
<https://doi.org/10.35219/AnnUgalShipBuilding.2020.43.09>

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English (self-assessment)	B2	C1	B2	B2	C1

Characteristics proactive, organised, open-minded, adaptable, detail-oriented

Job-related skills Multidisciplinary experience in ship design and engineering.
Experience in design, coordination, and approval of Basic Design projects (Class/Owner/Yard).

Digital competence CADMATIC, AutoCAD, MS Office, PipeFlo, AVEVA, Rhino, ANSYS

ANNEX 1 - Main projects, main activities, and responsibility inside the projects (ordered chronologically)

1. Research vessels, Supply offshore vessels, Windfarm support vessels, Cable Laying Vessel (2021-2024).
Basic Design activities, Preparing HVAC drawings, technical support for P&ID, Automation activities *Class: DNV, RINA, Lloyd Register, Class NK*
2. Cable Laying Vessel (2023-2024)
Basic Design activities, Preparing HVAC complete packages, Automation activities *Class: DNV*
3. Offshore renewable vessel (2023)
(Basic and Detail Design – Responsibility: Technical coordinator and Senior Mechanical Engineer for Piping & Machinery systems and HVAC, Consultancy for equipment purchasing, Yard support, technical support for detail design activities); *Class: DNV*
4. Passenger vessel (2023)
Piping & Machinery systems and part of HVAC. Consultancy for equipment purchasing, Yard support. *Class: DNV*
5. Hybrid workboat (2023)
Piping & Machinery systems and HVAC *Class: DNV*
6. Trawler (2023)
Piping & Machinery systems and HVAC *Class: DNV*
7. Multipurpose Tug Boat
(Basic and Detail Design – Responsibility: Technical coordinator and Senior Mechanical Engineer for Piping & Machinery systems and HVAC, Consultancy for equipment purchasing, Yard support, technical support for detail design activities); *Class: BV*
8. Cable Laying Vessel
(Basic and Detail Design – Responsibility: Technical coordinator and Senior Mechanical Engineer for Piping & Machinery systems and HVAC, Consultancy for equipment purchasing, Yard support). *Class: NK (Nippon Kaiji Kyokai)*
9. Oil Residues Collecting Tanker
(Initial and Basic Design – Responsibility: Project coordinator, Technical coordinator for Piping & Machinery systems and HVAC, Consultancy for equipment purchasing, Yard support). *Class: BV*
10. Polar Condensate Oil Tanker
(Part of Basic Design – Responsibility: Project Coordinator, Technical coordinator for Piping & Machinery systems and HVAC). *Class: BV and Russian Maritime Register of Shipping*
11. Polar Logistic Vessel
(Part of Basic Design – Responsibility: Project Coordinator, Technical coordinator for Piping & Machinery systems). *Class: BV*
12. Shallow Draught Multipurpose Workboat
(Initial and Basic Design – Responsibility: Project Coordinator, Technical coordinator for Piping & Machinery syst. and HVAC, Consultancy for equip. purchasing, Yard support, Sea trials). *Class: BV*
13. OSC& Pipelay Vessel
(Basic Design for Piping & Machinery systems – Responsibility: Technical coordinator and Mechanical Engineer). *Class: DNV GL*
14. Shallow Draught Survey Vessel
(Initial and Basic Design – Responsibility: Project Coordinator, Technical coordinator for Piping & Machinery and HVAC, Consultancy for equipment purchasing, Yard support, technical support for detail design activities, Sea trials); *Class: BV*
15. River Survey Vessel
(Initial and Basic Design – Responsibility: Technical coordinator and Senior Mechanical Engineer for Piping & Machinery systems and HVAC, Consultancy for equipment purchasing, Yard support, Sea trials). *Class: BV*
16. Cable Laying Vessel
(Basic design for Piping & Machinery systems – Responsibility: Technical coordinator and Senior Mechanical Engineer). *Class: DNV*
17. Survey Vessel
(Detail Design – Technical coordinator, Mechanical Engineer Piping & Machinery and HVAC, Yard support). *Class: Lloyd's register*
18. MEGAYACHT 120m
(Basic and Detail Design – Responsibility: Project coordinator, Technical coordinator for Piping & Machinery systems and HVAC, Consultancy for equipment purchasing, Yard support, PI documentation). *Class: BV*
19. WASTE COLLECTION AND TREATMENT VESSEL; OIL SPILL ASSISTANCE VESSEL; CUTTER SUCTION DREDGER
(Concept/Basic Design for Piping & Machinery, HVAC - Technical Coordinator) *Class: BV*
20. SHALLOW DRAUGHT ICE CLASS TUG
(Basic Design for Piping & Machinery systems – Responsibility: Senior Mechanical Engineer and Technical coordinator). *Class: BV*
21. AHTS 180TBP
(Basic design and Detail design – Responsibility: Mechanical Engineer and Technical coordinator for Piping & Machinery systems and HVAC, Yard support, technical support and coordinator of detail design, pipe routing and PI doc.). *Class: DNV*

SPECIAL PROJECT

Conversion of the existing SHALLOW DRAUGHT ICE CLASS TUG - for sailing through explosive and toxic environmental conditions (H₂S and CH₄ clouds)
Responsibility: Project Manager from Owner side, technical coordinator for concept and basic design, consultancy for equipment purchasing, Yard support, coordination of commissioning team, Sea trials.