

# **AURELIAN-ANDREI PANAT**

Address: 17 Rue Deparcieux 75014, Paris, France

Phone: (+40) 726109991

Email: aurelian-andrei.panait@etu.minesparis.psl.eu

Linkedin: http://www.linkedin.com/in/panait-andrei-52b598100

#### SUMMARY

Results-driven energy professional with a **Bachelor's degree in Energy Engineering**, and currently pursuing a **Master's degree in Energy**. Experienced in **energy markets**, trading, and renewable technologies. Skilled in data analysis, risk assessment, and energy modeling, with hands-on experience in electricity and gas trading, forecasting, and portfolio optimization. Passionate about flexibility systems, smart grids, and energy transition strategies.

#### **WORK EXPERIENCE**

## Commodity Trader, Tinmar Energy Bucharest

Jul. 2024 - Oct. 2024

- Tinmar Energy -leading private energy company in Romania
- Traded electricity, gas, and oil.
- In-depth market analysis, optimizing trading strategies.
- Optimized risk management and minimize exposure.

## **Energy Trading Analyst Intern, Tinmar Energy Bucharest**

Jun. 2023 - Oct. 2023

- Consumer energy portfolios, consumption forecasting models.
- Market risk assessment and analyzed energy price fluctuations.
- Analyzed trading patterns using market and water level data.

### Optical Technology Engineer, Spectro Optica Serv. Srl

Mar 2020 - June 2023

- Maintenance, troubleshooting, and optimization of optical technology equipment.
- Diagnostic assessments, calibration procedures, and maintenance protocols.
- High standards in optical performance and precision engineering solutions.

#### **EDUCATION**

#### **Undergraduate Studies in Electronic Engineering**

Sep. 2015 - Jul 2016

The University of Manchester, UK

Focused on Circuit Analysis, Digital System Design, Microcontroller Engineering.

## **Bachelor's in Energy Engineering**

Sep. 2020 - Jul 2024

National University of Science and Technology POLITEHNICA, Bucharest

- Grade 85.7% (Top 10% of class)
- Thesis: 'Floating Photovoltaic Panels: Assessing the Potential, Advantages, and Challenges of Capturing Solar Energy on Water Surfaces" Grade 98% (Top 1% of class)
- Tilted Global Solar Irradiance model for floating PV analysis.

#### Master's in Hydroinformatics and Water Engineering

Oct 2024 - Feb. 2025

National University of Science and Technology POLITEHNICA, Bucharest

- grade 94%
- Research: Study on the Influence of Floating Panels on Evaporation.

## Master's in Energy

Feb. 2025 - Present

MINES Paris - PSL, Paris, France

- Specialization: Renewable Energy Integration & Energy Efficiency.
- Core modules: Data Processing, Python, Basics of Nuclear Energy, Heat and Mass Transfer, Fluid Mechanics, Solid-State Electronics

## **KEY TECHNICAL SKILLS**

- Energy Modeling & Simulation: MATLAB/Simulink, Python, Ansys
- Programming & Data Analysis: Python (advanced), Excel (advanced), VBA(intermediate), C++
- Trading & Market Analysis: Energy derivatives, risk assessment, forecasting models
- Machine & Market Financial Models:Option Pricing,Interpretable Machine Learning (SHAP values, Partial Dependence Plots, Accumulated Local Effects)
- Software & Tools: AutoCAD, PVSyst, EPANET, ArcGIS
- Languages: Romanian(native), English(fluent), French(intermediate).
- Awards/Activities: Merit Scolarships:Uniersity of Manchester, Politehnica University of Bucharest