ALEXANDRU IONESCU, BSc

APPLICATION DEVELOPER | pfa.ionescu.alexandru@gmail.com | +40730305974

Education

*MSc **Environmental Physics and Eco-friendly materials** at Bucharest University* **Ongoing**

*BSc **Computer Games Programming** at Staffordshire University* **FIRST CLASS Honours**

***Excel Fundamentals for Data Analysis** at Macquarie University* **Diploma**

GWO: MH, WAH, FA, FAW, BTTM, BTTB, BTTI at WindPowerEnergy **Certificates**

Fire prevention, Tower Installation, SIT, ESOEP at Vestas Wind Systems A/S **Certificates**

Experience

***Data Science Internship at National Institute for Research in Optoelectronics* (Oct/2024 – Present)**
- Been part of the INOE 2000 team for the Cal/Val campaign of ESA EarthCARE
- Processed L1 and L2 Satellite and Ground LIDAR data
- Took part of LIDAR noise and depolarization calibration

***Application developer at PFA Ionescu Alexandru Mihai* (Oct/2023 - Present)**
- Created a C#/Unity application for replacing specific keywords in 5000 excel files at once, resulting in a 95% reduction in manual labour and saving an estimated 100 hours per project
- AI automation for filling 5000 values, resulting in an 80% reduction of manual labour
- Created LISP scripts for AutoCAD for automating the calculation of surface areas for multiple polygons at a time
- Integrated an automated booking system leading to a 50% decrease in congestion

***Web developer/IT(Associate) at Digital Assets* (**July/2023 – February/2024**)**
- Developed C# scripts for automating the process of manually handling over 7000 pdf files, resulting in a 60% increase in productivity due to the reallocation of tasks.
- Optimized a frontend web application and adapted it to mobile devices using React
- Created scripts for sending Data Layer through Google Tag Manager, using JavaScript

Personal portfolio (HTML, CSS, GitHub)
- Created an online personal portfolio containing my personal projects, hosted on GitHub: https://ionescualexandrum.github.io/newsite/

Projects

Task based software engineering (C#, F#, WPF, GitHub)
- Created an application for handling the local market accounting, of over 10000 Excel files, and query the data using the C#, WPF in order to visualise, understand and group the data types
- Optimised the application using the Tasks, Threads for better efficiency and faster solve time

Low level programming (C++, PS4)
- Enhanced a raytracing program by dividing the most memory-intensive function into multiple threads, resulting in a 1300% improved performance
- Developed a memory manager to track   leaks and identify high-memory-consuming functions
- Made use of cache memory to optimize loop algorithms

Technical skills			Languages
C#, C++	|OOP	| GitHub	| Romanian (native)
Python	|JS	| Premiere pro	| English (academic)
.NET	|Unity engine	| Photoshop	| Spanish (basic)

References

- Magdalena Kaminska (HSE Professional at Vestas)
- Zsolt Orban (Owner at Digital Assets)
- Craig Weightman (Professor at Staffordshire University)
- James Banton (Professor at Staffordshire University)
- Peter Cooper (Professor at Staffordshire University)