Curriculum vitae Europass

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Personal information

Name / Surname

PETCUȚ LASC Anca Adriana

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Nationality Romanian

Date of birth 13.04.1989

Professional experience

Period February 2025 – to date

Occupation or position held Trainer in the course *"Digital Competences for Using Information Technology as a Tool for Learning and Knowledge"*, within the project of *Aurel Vlaicu University of Arad*, implemented by *UNIC SPORTS SRL*.

Period September 2024 – to date

Occupation or position held Expert associated assistant

Main activities and responsibilities Prepare and deliver lectures, tutorials, and lab sessions on database concepts such as relational models, SQL, normalization, indexing, and transaction management.
Ensure that the content aligns with the curriculum and learning objectives of the course.
Develop lecture notes, slides, and supplementary materials.
Create lab assignments, projects, and exercises to reinforce theoretical concepts.
Offer academic support to students during office hours or scheduled consultations.
Guide students in applying database concepts to practical scenarios and projects.
Oversee hands-on sessions where students practice SQL queries, database design, and optimization techniques.
Troubleshoot technical issues and support students in using database software like MS Access, MySQL, PostgreSQL, or Oracle.

The name and address of the employer "Aurel Vlaicu" University, Exact Sciences Department, Elena Dragoi street, number 2, 2nd floor, Arad

Type of activity or sector of activity Teaching and researching topics related to IT, particularly database management laboratories.

Period April 2017 – to date

Occupation or position held Software system engineer

Main activities and responsibilities Development and maintenance of software applications and databases.
Providing assistance to users who use the developed software projects.
Development of existing applications and used databases.
Development of the specialist knowledge base.
Ensuring the proper functioning of equipment and existing projects.

The name and address of the employer Antaco Romania, Mun. Arad, Bld. Iuliu Maniu, Nr.31-35, Bloc A, Sc B

Type of activity or sector of activity IT services activities. Data processing, web page management and related activities

Period	September 2011 – April 2017
Occupation or position held	Programator
Main activities and responsibilities	Ensuring assistance to users who use the developed software projects. Development of existing applications and used databases.
The name and address of the employer	Computer Voice Systems Romania, Mun. Arad, Bld. Iuliu Maniu, Nr.31-35, Bloc A, Sc A
Type of activity or sector of activity	IT services activities. Data processing, web page management and related activities

Education and training

2024-prezent

PhD candidate

University of Petroleum - Gases from Ploiesti

Engineering Sciences

Systems Engineering

2011-2013

Master

Western University of Timișoara

Faculty of Mathematics and Computer Science

Analytical and geometric modeling of systems

2011-2013

Master

"Aurel Vlaicu" University, Arad

Faculty of Exact Sciences

Applied computing in science, technology and economics

2008-2011

Bachelor degree

"Aurel Vlaicu" University, Arad

Faculty of Exact Sciences

Mathematics Informatics

2008-2011

Bachelor degree

"Aurel Vlaicu" University, Arad

Faculty of Economic Sciences

Accounting and Management Informatics

2004-2008

High school

"Moise Nicoară" National College, Arad

Profile Real

Specialization Mathematics-Informatics Intensive Informatics

Computer skills and average programming skills

Personal skills and competences

Foreign languages known

Understanding				Speaking				Writing	
listening		Reading		Participating in the conversation		Speech		Written expression	
English language									
C1	Advanced user	C1	Advanced user	B2	Upper-Intermediate user	B2	Upper-Intermediate user	C1	Advanced user
French Franceză									
B2	Upper-Intermediate user	B2	Upper-Intermediate user	B1	Intermediate user	B1	Intermediate user	B1	Intermediate user

(*) The level of the Common European Framework of Reference for Foreign Languages

Social skills and competencies	- team spirit; - ability to adapt to multicultural environments - good communication skills
Organizational competences and skills	- leadership - organizational spirit - good project or team management experience.
StudMath-IT 2024 event	Being one of the organizers of the International Student Conference, StudMath-IT 2024, that was held at UAV University, Exact Sciences Department, between 21-22 November. I managed all the paperwork submitted to our event and also edited the StudMath-IT Book of Abstract. We had admitted 40 paper works from different countries.
Competences and computer skills	Computer skills Experience in Windows and Microsoft Office Programming in C/C++; Python; java; php; Database experience: MS Access, MySql, Oracle
Driver's license	Driving license category B

Published Papers and Conferences	**Petcuț-Lasc, A.-A.**, Bălaș, V. E., & Petcuț, F. M. (2024). Analysis of a residential photovoltaic system. *Proceedings of the XIV International Conference on Industrial Engineering and Environmental Protection (IIZS 2024)* (pp. 198–205). Zrenjanin, Serbia. https://doi.org/10.46793/IIZS24.198PL

Petcuț-Lasc, A.-A., Bălaș, V. E., Petcuț, F. M., Rotar, R., & Alexuță, D. (2025). Performance evaluation of a residential photovoltaic system in Matlab Simulink. *2025 IEEE 23rd World Symposium on Applied Machine Intelligence and Informatics (SAMI)* (pp. 435–440). IEEE. https://doi.org/10.1109/SAMI63904.2025.10883312

Petcuț-Lasc, A.-A., & Petcuț, F. M. (2025). MPPT strategies for PV systems under partial shading: A survey with emphasis on the Artificial Bee Colony algorithm. În *Proceedings of the 25th International Conference on Control Systems and Computer Science (CSCS25)*. Bucharest, Romania. IEEE. https://doi.org/10.1109/cscs66924.2025.00023

Petcuț-Lasc, A.-A., Bălaș, V. E., & Petcuț, F. M. (2025). A survey of MPPT techniques under partial shading conditions: Evaluating the Firefly algorithm's performance. *2025 18th International Conference on Engineering of Modern Electric Systems (EMES)* (pp. 1–6). IEEE. https://doi.org/10.1109/EMES65692.2025.11045613

Barna, C. , Petcuț, F. M., & **Petcuț-Lasc, A.-A.** (2025). Similarity Measurement of Uncertainty in Artificial Neural Networks Classification. *2025 IEEE 19th International Symposium on Applied Computational Intelligence and Informatics (SACI)* (pp. 327-330), Timisoara, Romania. IEEE. https://doi.org/10.1109/SACI66288.2025.11030144

Petcuț-Lasc, A.-A., Bălaș, V. E., Petcuț, F. M., & Barna, C. (2025). Modelling and identification of two genetic algorithms used for solar cell parameter. *2025 29th IEEE International Conference on Intelligent Engineering Systems (INES)* (pp. 21–26). IEEE. http://doi.org/10.1109/INES67149.2025.11078181

Petcuț-Lasc, A.-A., Bălaș, V. E., & Petcuț, F. M. (2025). Optimizing control of electric power production via photovoltaic panels: A survey on fuzzy technology, neural networks, and hybrid systems. *2025 IEEE 11th International Conference on Electrical Energy Systems (ICEES 2025)* (pp. 385–390). IEEE. https://doi.org/10.1109/ICEES67011.2025.11213153

Rotar, R., **Petcuț-Lasc, A.-A.**, Petcuț, F.-M., Oprițoiu, F., & Vlăduțiu, M. (2025). Failure Mode and Effects Analysis of a Microcontroller-Based Dual-Axis Solar Tracking System with Testing Capabilities. *Applied System Innovation*, *8*(6), 159. https://doi.org/10.3390/asi8060159

Petcuț-Lasc, A.-A., Bălaș, V. E., & Petcuț, F. M. (2025). Comparative Analysis of Residential Photovoltaic Systems: Impact of Shading and Orientation on Energy Production. *Proceedings of the XV International Conference on Industrial Engineering and Environmental Protection (IIZS 2025)* (in press). Zrenjanin, Serbia.

Petcuț-Lasc, A.-A., Bălaș, V. E., & Petcuț, F. M. (2025). Importanța poziționării corecte a panourilor fotovoltaice. *BACStud ENGINEERING INNOVATION CONTEST & EXPO (BACStud 2025)* (p. 23). Editura UAO (Agora), Băile Felix, Romania. ISBN 978-973-1807-63-8

Petcuț-Lasc, A.-A., Bălaș, V. E., & Petcuț, F. M. (2025). Edge-AI-driven photovoltaic energy optimization systems for renewable network infrastructure. *The 25th International Conference on Next Generation Wired and Wireless Advanced Networks and Systems (NEW2AN 2025)* (paper accepted). Springer. Abu Dhabi, UAE.

Petcuț-Lasc, A.-A., Bălaș, V. E., & Petcuț, F. M. (2025). Performance trends and efficiency limits of photovoltaic modules: An analysis based on NREL champion data. *IEEE 25th International Symposium on Computational Intelligence and Informatics (CINTI 2025)* (paper accepted). IEEE.