Laura Cornei

0773949130
cornei.laura10@gmail.com
LauraCornei
LauraCornei
Laura_Cornei
personal site

Education

Faculty of Computer Science (Research Master) 2021-2023

Alexandru Ioan Cuza University, Iaşi

Advanced Studies in Computer Science Master. My current research interests include Artificial Intelligence with focus on Machine Learning and NLP, Nature Inspired Methods, Big Data Analytics and Data Mining.

Faculty of Computer Science (Bachelor of Science) 2018-2021

Alexandru Ioan Cuza University, Iaşi

- Valedictorian. GPA: 9.98.
- Bachelor Thesis: "An ontology and neural networks based platform for improving impact policy assessment". Thesis grade: 10.
- Admitted to this faculty at the end of 11th grade by passing the pre-entrance exam.

Grigore Moisil 2015-2018

Computer Science high school, Iaşi

- Valedictorian

Experience

Teaching Collaborator

Faculty of Computer Science – providing explanations & creating additional resources for the labs, proposing & coordinating projects, evaluating homework and projects.

Algorithm Design class (1st year, BSc) – 3 groups	Feb 2023 - present
Artificial Intelligence class (3rd year, BSc) – 2 groups	Oct 2022 - Feb 2023
Artificial Intelligence class (3rd year, BSc) – 2 groups	Oct 2021 - Feb 2022

Private Sky internship summer 2020
Faculty of Computer Science – research internship (Semantic Web)

Mentorship program summer 2018
Amazon, Iaşi – mentorship focused on algorithms and data structures

Awards

International

ICPC South-East European Regional Contest: 11th place 2019-2020
ICPC South-East European Regional Contest: 36th place 2018-2019

National

Catalysts Coding Contest: 3rd place 2019-2020
RCPC (Romanian Collegiate Programming Contest): 12th place 2019-2020
Catalysts Coding Contest: 5th place 2018-2019
RCPC (Romanian Collegiate Programming Contest): 18th place 2018-2019
Sapientia ECN Programming and Mathematics Contest: 1st place among high school teams 2017-2018
InfoCup: 3rd place 2017-2018

Regional

ITMarathon: 1st place	2017-2018
Computer Science County Olympiad: 3rd prize	2017-2018
ITMarathon: 2nd place	2016-2017
Computer Science County Olympiad: 3rd prize	2016-2017
English County Olympiad: 1st place	2015

Other achievements

- Problem setter and part of contest committees in several algorithmic contests: (IIOT) International Informatics Olympiad in Teams, National contest "ProSoft@NT", National contest "Urmașii lui Moisil", OMI – local phase of Olympiad in Informatics, Infogim.
- Amazon Learn&Earn prize for the second highest score - Programming Engineering subject (2020)
- Completed psycho-pedagogical module 1

Skills

- Programming languages: Python, Java, C/C++, NodeJS, Scala, Prolog, Clips
- Technologies: ML & NLP (Scikit-Learn, Keras, Hugging Face, Gensim, SpaCy, NLTK), Cloud Computing (Google & Microsoft Azure Cloud), Big Data Analytics (Spark, Hadoop), Semantic Web (Stardog, Protege).
- Languages: Romanian (native), English (C2), French (B2)

Research activity

Publications

- Sergiu Amihaesei, Laura Cornei, George Stoica - Appeal for attention at SemEval-2023 Task 3: Data augmentation and extension strategies for detection of online news persuasion techniques, Proceedings of the 17th International Workshop on Semantic Evaluation (SemEval) Canada, Toronto, 13-14 July, 2023
- Laura Cornei, Diana Trandabăț - DBSpark: A system for natural language to SPARQL translation, *17th International Conference on Research Challenges in Information Science (RCIS),* Greece, Corfu, 23-26 May 2023
- Laura Cornei, Lenuța Alboaie - An ontology and neural networks based platform for improving impact policy assessment, 26th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES), Italy, Verona, 7-9 September, 2022

Research in progress

- Proposed an unsupervised feature selection algorithm that combines the multi objective evolutionary algorithm NSGA II with a local Hill Climbing based search. Provided an efficient distributed implementation in Spark for this algorithm. | Nature-Inspired Methods, Big Data Analytics

Projects

- Built a technology transfer social network with the purpose of connecting researchers and companies, using APIs and Services from Google Cloud and Azure to include functionalities such as search by common interests and proximity and an instant messaging service | Cloud Computing
- Used Deep Q-Learning to solve the *Waterworld* game | Deep Learning
- Created a Prolog and definite clause grammar-based system able "to learn" the English grammar, update its vocabulary with new words and check if given sentences are parsable | Rule based programming
- Contributed to https://github.com/eugennc/LearningRockets project by implementing 3D rotations using quaternions | Physics and Graphics
- Developed a Semantic Web application offering smart browsing, filtering and recommendations regarding non-alcoholic beverages | Semantic Web