Andrei Gaita

Curriculum Vitae

Professional Experience

2018 — **Machine Learning Engineer**, *Optimization of IC verification using Machine Learning*, Infineon Technologies

2017–2018 — **Full Stack developer**, *CloudLens Public - Visibility-as-a-Service for public cloud technologies*, Keysight Technologies

2016–2017 — **Software developer**, *Character recognition software for wagon registration plates*, Phirlo Vision

2015 — **Research Assistant**, "Feasibility study on measuring sediment discharge in rivers", GIPSA LAB (Grenoble, FRANCE)

Educational Background

2018–2024 — **PhD Electronics Engineering, Telecommunications and Information Technology**, *Faculty of Electronics, Telecommunications and Information Technology – National University of Science and Technology Politehnica Bucharest*, Bucharest, Romania

2016–2018 — **MSc Multimedia technologies in biometrics and information security applications**, *Faculty of Electronics, Telecommunications and Information Technology – University POLITEHNICA of Bucharest* , Bucharest, Romania

2012–2016 — **BSc Technologies and Telecommunication Systems**, *Faculty of Electronics, Telecommunications and Information Technology – University POLITEHNICA of Bucharest* , Bucharest, Romania

Projects

ROBOTICS & AUTOMATION

- Adaptive and Intelligent Systems for monitoring industrial laser machines
- Exploring system of an obstacle envinronment for Nao humanoid robot
- Control system of a hexapod robot through a web interface

ARTIFICIAL INTELLIGENCE

- Digitalization of printed forms with character recognition
- Detection system of illegal forest exploitation, based on sound signal analysis
- Surveillance and movement detection system by image analysis
- Vehicle recognition and distance determination

Skills

Programming	Python, Java EE, Spring, Matlab
Web-oriented	Javascript, Vuejs, HTML, CSS
Database	MySQL, SQL Server, DynamoDB
Other Skills	Communication, Organization, Writing, Team-working

Languages

Romanian	Native
English	Fluent

Publications

[1] A. Gaita, E. David, A. Buzo, M. Grigore, C. Burileanu, H. Cucu, and G. Pelz, "Convolutional neural network model used for aiding ic analog/mixed signal verification," *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES C-ELECTRICAL ENGINEERING AND COMPUTER SCIENCE*, vol. 85, no. 2, pp. 151–162, 2023.

[2] A. Gaita, A. Buzo, E. David, H. Cucu, and G. Pelz, "A machine learning based wafer test ranking for root cause analysis," in *2022 International Symposium ELMAR*, pp. 45–48, 2022.

[3] A. Gaita, E. David, A. Buzo, H. Cucu, and G. Pelz, "Waveform clustering based on dynamic time warping used in analog ic verification," in *2022 International Symposium ELMAR*, pp. 49–52, 2022.

[4] A. Gaita, G. Nicolae, E. C. David, A. Buzo, C. Burileanu, and G. Pelz, "A sift-based waveform clustering method for aiding analog/mixed-signal ic verification," in *2020 IEEE European Test Symposium (ETS)*, pp. 1–2, 2020.

[5] A. Gaita, G. Nicolae, A. Radoi, and C. Burileanu, "Chainsaw Sound Detection based on Spectral Haar Coefficients," in *PROCEEDINGS OF ELMAR-2018: 60TH INTERNATIONAL SYMPOSIUM ELMAR-2018*, ELMAR Proceedings, pp. 139–142, 2018. 60th ELMAR International Symposium, Zadar, CROATIA, SEP 16-19, 2018.

[6] G. Nicolae, A. Gaita, A. Radoi, and C. Burileanu, "A Method for Chainsaw Sound Detection Based on Haar-like Features," in *2018 41ST INTERNATIONAL CONFERENCE ON TELECOMMUNICATIONS AND SIGNAL PROCESSING (TSP)*, pp. 714–718, , 2018. 41st International Conference on Telecommunications and Signal Processing (TSP), Athens, GREECE, JUL 04-06, 2018.