INFORMAŢII PERSONALE

Vlad-Cristian Miclea

EXPERIENTA PROFESSIONALA

Septembrie 2019 - Prezent

Asistent

Departamentul de calculatoare, Universitatea Tehnica din Cluj-Napoca

- Activitate didactica privind materiile Logic Design, Proiectare logica, Digital System Design, Proiectarea Sistemelor Numerice, Arhitecutra Calculatoarelor
-

Noiembrie 2014 - Prezent

Asistent de cercetare

Centrul de cercetare in procesare de imagini si recunoastere a formelor, Universitatea Tehnica din Cluj-Napoca

- Cercetare privind dezvoltarea unor algoritmi de perceptie a profunzimii bazati pe resonstructie stereo, senzori LiDAR sau camere mono. Imbunatatirea perceptiei folosind algoritmi de invatare automata. Cercetare privind dezvoltarea unor algoritmi de invatare profunda pentru perceptia mediului in scenarii de trafic

Ianuarie 2014 – Iulie 2014

Stagiu de cercetare

Institutul National de Cercetare in Informatica si Automatica (INRIA), echipa CITI, Centrul Lyon, Franta

- Cercetare privind dezvoltarea unui procesor care sa calculeze „Just Right”, folosind precizie variabila

Iunie 2012 – Octombrie 2012

Stagiu de cercetare

Institutul National de Cercetare in Informatica si Automatica (INRIA), echipa CARAMEL, Centrul Nancy, Franta

- Cercetare in criptografie – implementarea pe FPGA a unor operatii aritmetice pentru algoritmul Function Field Sieve

Sept. 2011 – Iunie 2012

Stagiu de cercetare

National Instruments, Cluj-Napoca, Romania

- Cercetare privind dezvoltarea unor algoritmi de toleranta la defectari a memoriilor si dispozitivelor FIFO, folosind tehnici TMR, implementate pe FPGA

Octombrie 2007 – Iulie 2010

Membru

Organizatia YouthBank, Fundatia Comunitara Cluj, Cluj-Napoca

- Trainer, fundraiser, responsabil PR, finantator de proiecte,

EDUCAŢIE ŞI FORMARE

2015 - 2021

Doctorat

Universitatea Tehnica din Cluj-Napoca, Cluj-Napoca, Romania

- Perceptia Profunzimii folosind Tehnici de Invatare Automata

2013 - 2014

Master

Ecole Normale Supérieure de Lyon, Lyon, Franta

© Uniunea Europeană, 2002-2012 | http://europass.cedefop.europa.eu

- Master de Cercetare in Informatica Fundamentala

2009 - 2013

Diploma de inginer

Universitatea Tehnica din Cluj-Napoca, Cluj-Napoca, Romania

- Calculatoare in limba engleza (cea mai mare nota la examenul de admitere)

Sept 2010 - Dec 2010

Student Erasmus

University College Cork, Cork, Irlanda

2005 - 2009

Diploma de bacalaureat

Liceul Teoretic "Nicolae Balcescu", Cluj-Napoca, Romania

- Profil real, Matematica-Informatica

COMPETENTE PERSONALE

Limba(i) maternă(e): Romana

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversaţie	Discurs oral	
Engleza	C1	C1	C1	C1	C1
	Cambridge English: Advanced (CAE), certificat obtinut: Mai, 2013				
Specificaţi limba străină	B2	B2	B1	B1	B1
	Certificat obtinut la admiterea la master: Martie 2013				

Niveluri: A1/2: Utilizator elementar - B1/2: Utilizator independent - C1/2: Utilizator experimentat
Cadrul european comun de referinţă pentru limbi străine

Competenţe de comunicare

- Sociabil si comunicativ, am facut parte din multe echipe ca membru si ca leader. Am practicat diferite sporturi de echipa si am facut volunariat in diferite organizatii pe perioada liceului si a facultatii.

Competenţe organizaţionale/manageriale

- Leadership (Presedintele studentilor pe perioada studiilor, departamentul calculatoare, UTCN)
- Absolvent al mai multor module CODECS – Liderii mileniului 3
- Absovent al unui curs de TOT (Training of trainers, organizat in cadrul YouthBank)

Competenţe informatice

- Limbaje: VHDL, SystemC, C, C++, JAVA, Python, CUDA C, MATLAB, LATEX
- Sisteme de operare: Windows, Linux
- Microsoft Visual Studio, Eclipse IDE, CLion IDE, PyCharm IDE, Xilinx ISE, Matlab

Permis de conducere: B

© Uniunea Europeană, 2002-2012 | http://europass.cedefop.europa.eu

Publicaţii relevante

- V. Miclea and S. Nedevschi, "Monocular Depth Estimation with Improved Long-range Accuracy for UAV Environment Perception", IEEE Transactions on Geoscience and Remote Sensing, doi: 10.1109/TGRS.2021.3060513. **I.F: 5.855**
- V. Miclea and S. Nedevschi, "SGM-MDE: Semi-global optimization for classification-based monocular depth estimation", 2020 IEEE/RSJ, International Conference on Intelligent Robots and Systems (IROS), publicat in 2020. **Conferinta Rank A.**
- V. Miclea and S. Nedevschi, "A unified method for improving long-range accuracy of stereo and monocular depth estimation algorithms," 2020 IEEE Intelligent Vehicles Symposium (IV), Las Vegas, NV, USA, 2020
- V. Miclea and S. Nedevschi, Real-Time Semantic Segmentation-Based Stereo Reconstruction, in IEEE Transactions on Intelligent Transportation Systems. doi: 10.1109/TITS.2019.2913883, **I.F: 6.319**
- V. C. Miclea, L. Miclea, and S. Nedevschi. Real-time stereo reconstruction failure detection and correction using deep learning. In The 21st IEEE International Conference on Intelligent Transportation Systems (ITSC), November 2018.
- V. C. Miclea, L. Miclea, and S. Nedevschi. Increasing dependability of stereo reconstruction through deep learning. In Third IEEE International Workshop on Automotive Reliability and Test (ART18), October 2018.
- V. C. Miclea and S. Nedevschi. Deep learning techniques for depth perception enhancement. In Deep Learning in Automated Driving Workshop at IEEE ICCP 2018, September 2018.
- C. Timbus, V. C. Miclea, and C. Lemnaru. Semantic segmentation-based traffic sign detection and recognition using deep learning techniques. In 2018 IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP), September 2018.
- V. C. Miclea and S. Nedevschi. Real-time semantic segmentation-based depth upsampling using deep learning. In 2018 IEEE Intelligent Vehicles Symposium (IV), June 2018 - **Best Applicative Paper Award**.
- V. C. Miclea and S. Nedevschi. Deep learning-based approaches for stereo reconstruction. In Deep Learning in Automated Driving Workshop at IEEE ICCP 2017, September 2017.
- V. Miclea and S. Nedevschi. Semantic segmentation-based stereo reconstruction with statistically improved long range accuracy. In 2017 IEEE Intelligent Vehicles Symposium (IV), pages 1795–1802, June 2017.
- V. C. Miclea and S. Nedevschi. Optimizing Census-based Semi Global Matching by genetic algorithms. In 2016 IEEE 12th International Conference on Intelligent Computer Communication and Processing (ICCP), pages 193–198, Sept 2016.
- C. C. Vancea, V. C. Miclea, and S. Nedevschi. Improving stereo reconstruction by sub-pixel correction using histogram matching. In 2016 IEEE Intelligent Vehicles Symposium (IV), pages 335–341, June 2016.
- V. C. Miclea, C. C. Vancea, and S. Nedevschi. New sub-pixel interpolation functions for accurate real-time stereo-matching algorithms. In 2015 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP), pages 173–178, Sept 2015.
- V. C. Miclea. Speeding-up polynomial multiplication on Virtex FPGAs: Finding the best addition method. In 2014 IEEE International Conference on Automation, Quality and Testing, Robotics, pages 1–5, May 2014.
- Vlad Miclea. ProCoJuRi - A Processor Computing Just Right. Master Thesis, 2014.
- Vlad Miclea. Cryptography on Reconfigurable Hardaware – Polynomial Multiplication and the Function Field Sieve Algorithm. License Thesis, 2013.
- Vlad Miclea. Addition Methods for the Implementation of Serial/Parallel Polynomial Multiplication on Virtex FPGAs. In Computer Science Students Conference, Cluj-Napoca, CSSC, 2013.

© Uniunea Europeană, 2002-2012 | http://europass.cedefop.europa.eu