

## **CURRICULUM VITAE OF THE PRINCIPAL INVESTIGATOR**

**First name, Family Name : Marius Leordeanu**

**Date of birth : May 11, 1980**

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### **• EDUCATION**

**PhD in Robotics, The Robotics Institute, Carnegie Mellon University, USA, 2009**

Specialization in Computer Vision, GPA 3.92/4.0.

PhD Thesis: *Spectral Graph Matching, Learning and Inference for Computer Vision*

PhD Advisor: Prof. Martial Hebert, Director of the Robotics Institute.

**Bachelor's degrees in Mathematics and Computer Science, Hunter College, New York, 2003**

Research work on automatic 3D registration of large-scale urban scenes.

Scientific Advisor : Prof. Ioannis Stamos with whom we published a paper at CVPR 2003.

**Habilitation in Computer Science, October 2015, Romanian Academy, Romania.**

### **• POSITIONS**

**Associate Professor/Senior Lecturer, 2015–present, Computer Science Department, University Politehnica of Bucharest.**

**Senior Researcher, 2010 – present, Institute of Mathematics of the Romanian Academy.**

### **• FELLOWSHIPS AND AWARDS**

“Grigore Moisil” Prize in Mathematics, top prize awarded yearly by the Romanian Academy, 2014

Honorable Mention, Computing Research Association Outstanding Undergraduate Award, USA, 2003.

Joseph A. Gillet Memorial Prize in Mathematics, USA, 2003.

Intel PhD Fellowship, USA, 2007-2009 (less than 30 in USA per year awarded).

National Science Foundation Scholarship, USA, 2002-2003.

Prizes at the National Physics Olympiad: Absolute First – 1994; Second – 1996, 1998; Third – 1995.

### **• PUBLICATIONS**

First author of 15 papers published in high impact factor journals (TPAMI, IJCV), book chapters and top international conferences (CVPR, ICCV, NIPS, ICML, AAI, ECCV, AISTATS).

Google profile: <https://scholar.google.ro/citations?user=se9kni0AAAAJ&hl=en&oi=ao>

Total citations (Google Scholar): **4733. H-index: 20.**

M. Leordeanu and M. Hebert, A Spectral Technique for Correspondence Problems Using Pairwise Constraints, International Conference on Computer Vision (ICCV), 2005. **Category A+. Cites: 906.**

M. Leordeanu, M. Hebert and R. Sukthankar, An integer projected fixed point method for graph matching and map inference, Advances in Neural Processing Systems, 2009. **Cat. A+. Cites : 213.**

M. Leordeanu, R. Sukthankar, M. Hebert, Unsupervised learning for graph matching, International Journal of Computer Vision (IJCV), 2012. **Impact Factor: 11.54, Cites: 153**

M. Leordeanu, R. Sukthankar and C. Sminchisescu, Generalized Boundaries from Multiple Image Interpretations, IEEE Trans. On Pattern Analysis and Machine Intelligence, 2014, **IF: 9.45. Cites: 32**

M. Leordeanu, A. Zanfir and C. Sminchisescu, Locally Affine Sparse-to-Dense Matching for Motion and Occlusion Estimation, ICCV, 2013. **Category A+. Cites: 57.**

### **• SUPERVISION OF PHD STUDENTS AND TEACHING**

Supervising seven PhD students, with whom we publish in top computer vision/AI conferences. I have also co-supervised two graduate students together with Prof. Cristian Sminchisescu, with whom we had several papers published in top vision conferences.

**Teaching:** I teach graduate level courses in Computer Vision and Robotics, which I have introduced for the first time at University Politehnica of Bucharest.

I also organize and coordinate an advanced weekly seminar in Machine Learning and Computer Vision. **Our websites:** <https://sites.google.com/site/bucharestcomputervision/> and <https://sites.google.com/view/bucv/home>.

- **ORGANISATION OF SCIENTIFIC MEETINGS**

**Co-organizer** of the International Summer School on Imaging for Medical Applications, Sibiu, 2018.

Website of the event: <http://gomit.tech/ssima/>

**Co-chair and organizer** for Exploratory Workshop on Computer Vision, Learning and Robotics, during “*Diaspora in Cercetarea Stiintifica si Invatamantul Superior din Romania*”, Bucharest, 2012.

**Special Sessions Chair** for ACM International Conference on Multimedia Retrieval, 2017.

**Area Chair for WACV 2018** – the top conference on applications for computer vision.

- **MEMBER OF EDITORIAL BOARDS**

Editor for Machine Vision and Applications (MVA), Impact factor: 2.0.

Editor for IET Computer Vision, Impact factor: 1.1

- **SCIENTIFIC GRANTS WON AS PRINCIPAL INVESTIGATOR**

**ERC-2016-0007 (170000 Euro)** “The Classifier Graph: A Recursive Multiclass Network for Deep Category Recognition in Images and Video”.

**PED-2016-1842 (105000 Euro)** “Automatic linguistic descriptions of objects, people and their interactions in indoor videos”.

**PCE-2012-4-0581 (300000 Euro)**, “Automatic Video Understanding at Middle and Higher Levels of Interpretation”.

**POC-A1.2.1D-2015-P39-287 (1 million Euro)** – Lead researcher together with Conf. Traian Rebedea, „Automatic interpretation of images and video sequences using natural language processing”,

**PN-III-P1-1.2-PCCDI2017-0734 (1.7 million Euro)** „Robots and Society: Cognitive Systems for Personal Robots and Autonomous Vehicles” (I am the PI of the IMAR Partner).

- **PATENTS and COLLABORATIONS WITH COMPANIES**

Marius Leordeanu, Vlad Licaret, Tudor Burzu and Iulia Muntianu, Automated Detection and Counting of Lumber Boards with Handheld Device, US Patent Application 33519, 2017

I am the coordinator of the Computer Vision group at Bitdefender, a leading IT company in Romania, which is offering support to some of my PhD and Masters students. Website: <https://bit-ml.github.io>

I am also the coordinator of the Computer Vision group at Fordaq ([www.fordaq.com](http://www.fordaq.com)), a leading B2B company in the wood industry, with which we develop different Computer Vision solutions for recognizing, segmenting and measuring different types of wood in images. We have developed the first application for detection and counting of lumber boards using a smart phone, which is now sellin in US and on international markets.

- **INVITED TALKS**

**2010-2017:** over 30 keynote/invited talks at international conferences (RAAI 2017, 2018; BCI 2015; HEART 2017), research laboratories (DeepMind 2017; Ixia Labs 2014; Garmin 2013), universities (Oxford 2013; Univ of Pennsylvania 2010; Univ of Houston 2010; Carol Davila University of Medicine and Pharmacy 2017 ; University of Bucharest 2015; Politehnica University of Timisoara 2017) and summers schools (SSIMA 2017, 2018; TMLSS 2018;) and TV science programs (Digi24, Discovery Channel, TEDxUPB 2018), among others. A complete list of my talks is available on my site: <https://sites.google.com/site/mariusleordeanu/home>

- **OTHER ACTIVITIES**

**Popular science:** M. Leordeanu, „My name is blue”, 178 pages, Green Valley, 2016

**Poetry:** M. Leordeanu, “The story of a word”, 76 pages, Papirus Media, 2013.

**Music composition:** Available online at: <https://www.youtube.com/user/MariusLeordeanu>.

Data : 28.11.2018

Marius Leordeanu