

## Mihai Zanfir

Location: Bucharest, Romania  
Research Assistant

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### Research and Work Experience

- **Institute of Mathematics of the Romanian Academy** Bucharest, Romania  
*Research Assistant/PhD Student* 2010 - 2018
  - Computer Vision and Machine Learning
    - \* My principal research interests are human action recognition from RGB and depth sensors, and 3D human sensing for the task of pose, shape and clothing reconstruction from natural images
  - Responsibilities
    - \* Working on solutions for computer vision problems and writing scientific articles
    - \* I am part of the DE-ENIGMA project, which is developing artificial intelligence for a commercial robot. The robot will be used in assisting therapy for children diagnosed with autism. My responsibilities include data acquisition and building a perception module that interprets the children's gestures and emotions from video data
    - \* Reviewing papers for all major computer vision conferences and journals (e.g. PAMI, IJCV, CVPR, ICCV, ECCV, ACCV)
  - Acquired aptitudes
    - \* Working as part of a team and being able to cooperate and exchange ideas with colleagues
    - \* Working well under pressure
    - \* Staying connected to the research and ideas in my field of work
    - \* Designing and implementing methods that use techniques such as deep neural networks, recurrent neural networks, GANs, auto-encoders, graphical models, numerical optimization, 3D modelling etc.

### Education

- **Bucharest "POLITEHNICA" University** Bucharest, Romania  
*MSc* 2010 - 2012
  - Principal subjects covered: Artificial intelligence and machine learning
  - Natural language processing
  - Data mining
  - Neural networks
  - Multi-agent systems
- **Bucharest "POLITEHNICA" University** Bucharest, Romania  
*BSc* 2006 - 2010
  - Principal subjects covered: Computer science
  - Design of hardware, software and communication systems
  - Algorithms and information processing
  - Computing systems architecture and program engineering

## Publications

- M. Zanfir, M. Leordeanu, C. Sminchisescu: "The moving pose: An efficient 3d kinematics descriptor for low-latency action recognition and detection", In *International Conference on Computer Vision (ICCV) 2013, Sydney, Australia*
- M. Zanfir, E. Marinoiu, C. Sminchisescu: "Spatio-temporal attention models for grounded video captioning", In *Asian Conference on Computer Vision (ACCV) 2016, Taipei, Taiwan*
- A. Popa, M. Zanfir, C. Sminchisescu: "Deep multitask architecture for integrated 2D and 3D human sensing", In *Conference on Computer Vision and Pattern Recognition (CVPR) 2016, Honolulu, Hawaii*
- M. Zanfir, A. Popa, A. Zanfir, C. Sminchisescu: "Human Appearance Transfer", In *Conference on Computer Vision and Pattern Recognition (CVPR) 2018, Salt Lake City, USA*
- E. Marinoiu, M. Zanfir, V. Olaru, C. Sminchisescu: "3D Human Sensing, Action and Emotion Recognition in Robot Assisted Therapy of Children with Autism", In *Conference on Computer Vision and Pattern Recognition (CVPR) 2018, Salt Lake City, USA*
- A. Zanfir, E. Marinoiu, M. Zanfir, A. Popa, C. Sminchisescu: "Deep Network for the Integrated 3D Sensing of Multiple People in Natural Images", In *Conference on Neural Information Processing Systems (NIPS) 2018, Montreal, Canada*

## Tools

- Proficient in C/C++, C#, Matlab, Python, Java
- Experienced in using computer vision/machine learning libraries such as: NumPy, SciPy, OpenCV, Caffe, TensorFlow

## Miscellany

- Foreign languages: Romanian (native), English (advanced), French (basic)

12.10.2018



## LISTĂ DE PUBLICAȚII MIHAI ZANFIR:

- M. Zanfir, M. Leordeanu, C. Sminchisescu: "The moving pose: An efficient 3d kinematics descriptor for low-latency action recognition and detection", In *International Conference on Computer Vision (ICCV) 2013, Sydney, Australia*
- M. Zanfir, E. Marinoiu, C. Sminchisescu: "Spatio-temporal attention models for grounded video captioning", In *Asian Conference on Computer Vision (ACCV) 2016, Taipei, Taiwan*
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