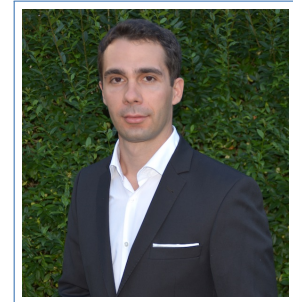


Vasileios Belagiannis

Résumé

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Education

- 11.2011-09.2015 **Dr. rer. nat.**, *Technische Universität München (TUM), Department of Informatics, Munich, Germany, summa cum laude.*
Dissertation: Human Pose Estimation in Complex Environments. Advisor: Prof. Dr. Nassir Navab, Supervisor: PD Dr. Slobodan Ilic.
- 10.2009-10.2011 **M.Sc.**, *Technische Universität München (TUM), Department of Informatics, Munich, Germany, Computational Science and Engineering.*
Master Thesis: Combining Tracking and Detection for Fast and Robust Object Localisation. Advisor: Prof. Dr. Nassir Navab, Supervisor: PD Dr. Slobodan Ilic, Dr. Falk Schubert (EADS - Airbus Group).
- 09.2004-07.2009 **Diplomate Engineer**, *Democritus University of Thrace, Department of Production and Management Engineering, Xanthi, Greece.*
Diploma Thesis: Detection and Tracking of Moving Targets. Advisor: Prof. Antonios Gasteratos.

Professional Experience

- 12.2018- **Assistant Professor**, *Institute of Measurement, Control and Microtechnology, Universität Ulm, Ulm, DE.*
W1 - Juniorprofessur, working on information fusion, machine learning and deep learning.
- 04.2017-11.2018 **Senior Researcher**, *Computer Vision, OSRAM GmbH, Munich, DE.*
Post-doc position funded by BMWi project MEC-View – Mobile Edge Computing basierte Objekterkennung für hoch- und vollautomatisiertes Fahren.
- 09.2015-04.2017 **Research Fellow**, *Visual Geometry Group, Department of Engineering Science, University of Oxford, Oxford, UK.*
Post-doc position funded by EPSRC project Seebibyte: Visual Search for the Era of Big Data, Reference: Prof. Andrew Zisserman.
- 10.2011-08.2015 **Research Assistant**, *Computer Aided Medical Procedures (CAMP), Technische Universität München (TUM), Munich, Germany.*
Since 2015 affiliated as guest lecturer and research collaborator, Reference: Prof. Dr. Nassir Navab, PD Dr. Slobodan Ilic.
- 03.2011-08.2011 **Researcher - Intern**, *EADS - Airbus Group, Ottobrunn, Germany.*
Project: Object tracking from UAV's (Unmanned Aerial Vehicles).
Reference: Dr. Falk Schubert

- 12.2009-02.2011 **Researcher - HiWi**, *Computer Aided Medical Procedures (CAMP)*, Technische Universität München (TUM), Munich, Germany.
HiWi student on Applications of the Hough transform in Augmented Reality (AR). Reference: Prof. Gudrun Klinker, Ph.D.
- 08.2010-10.2010 **Intern**, *EADS - Airbus Group*, Ottobrunn, Germany.
Topic: Project: Passenger entertainment using tablet computers and vision. Reference: Stefan Schneelee.
- 01.2006-06.2009 **Undergraduate Assistant**, *Democritus University of Thrace, Department of Production and Management Engineering*, Xanthi, Greece.
Project: Tracking objects from a multi-view vision system. Autonomous Collaborative Robots to Swing and Work in Everyday Environment (ACROBOTER), funded by FP6-IST-2006-045530, Reference: Prof. Antonios Gasteratos.
- 07.2008-08.2008 **Intern**, *Venus Growers*, Alexandria, Greece.
Topic: Production control in food industry.

Teaching Experience

- 2019 - **Lecturer**, *Introduction to Deep Learning*, Universität Ulm, Ulm, Germany.
- 2017 - 2018 **Guest Lecturer**, *Deep Generative Models (Seminar)*. *Computer Aided Medical Procedures (CAMP)*, Technische Universität München (TUM), Munich, Germany.
- 2016 - 2017 **Teaching Assistant**, *Computer Vision*. *Hilary Term 2016 and 2017*. Department of Engineering Science, University of Oxford, Oxford, UK.
- 2017 **Lab Assistant**, *B16 Software Engineering Laboratory*. *Hilary Term 2017*. Department of Engineering Science, University of Oxford, Oxford, UK.
- 2011-2015 **Teaching Assistant**, *Machine Learning Methods for Computer Vision Applications (Seminar)*. Department of Informatics, Technische Universität München (TUM), Munich, Germany.
- 2011-2014 **Teaching Assistant**, *Tracking and Detection in Computer Vision*. *Winter Semester 2011/12, 2012/13, 2013/14*, Department of Informatics, Technische Universität München (TUM), Munich, Germany.
- 2012-2014 **Teaching Assistant**, *3D Computer Vision*. *Summer Semester 2012 & 2014*, Department of Informatics, Technische Universität München (TUM), Munich, Germany.

Mentoring

- 2019- **Lukas Weber**, *PhD Student on Neural Architecture Search for Vision*, Universität Ulm.
- 2019 **Tarik Enderes**, *Bachelor Thesis on Semantic Object Segmentation for Autonomous Driving*, Universität Ulm.
- 2017-2019 **Leslie Casas**, *PhD Student on Human Motion Recovery from Inertial IMU Sensors and Signal Denoising*, Technische Universität München (TUM), Co-Supervised with Prof. Nassir Navab.
- 2018 **Azade Farshad**, *Master Thesis: Deep Neural Network Compression*, Technische Universität München (TUM) and OSRAM GmbH, Co-Supervised with Prof. Nassir Navab.

- 2017 **Honglie Chen**, *4th-Year Thesis: Recognition In Large-Scale Satellite Imagery Using Deep Learning*, University of Oxford, Co-Supervised with Prof. Andrew Zisserman.
- 2015 **Iro Laina**, *Master Thesis: Depth prediction using deep neural networks*, Technische Universität München (TUM), Co-Supervised with Prof. Nassir Navab.
- 2015 **Adrien Desies**, *Master Thesis: Deep learning applications in computer vision*, Technische Universität München (TUM), Co-Supervised with Prof. Nassir Navab.
- 2014 **Nikoletta Mouriki**, *Master Thesis: Human-Machine interfaces for limb amputees*, Technische Universität München (TUM), Co-Supervised with Prof. Nassir Navab.
- 2014 **Ahmed Matar**, *Bachelor Thesis: Marker-based 3D camera pose estimation*, Technische Universität München (TUM), Co-Supervised with Prof. Nassir Navab.
- 2013 **Christian Amann**, *Master Thesis: Monocular Feature Based Pose Estimation and Tracking of Humans*, Technische Universität München (TUM), Co-Supervised with Prof. Nassir Navab, Dr. Slobodan Ilic.
- 2012 **Fausto Milletari**, *Master Thesis: Visual object tracking: a comparison between online and offline learning based methods.*, Technische Universität München (TUM), Co-Supervised with Prof. Nassir Navab, Dr. Slobodan Ilic.

Awards

- 2017 BMVC 2017 Outstanding Reviewer.
- 2015 ICCV 2015 Doctoral Consortium.
- 2010 Deutscher Akademischer Austausch Dienst (DAAD).
- 2004-2008 Greek State Scholarships Foundation (I.K.Y.).

Languages

Greek	Native
English	Fluent
German	Fluent
French	Elementary

Selected Invited Talks

- 2018 Introduction to GANs, Advanced Deep Learning Workshop, Munich.
- 2017 Keypoint detection with deep models, OSRAM.
- 2016 Deep Learning Workshop - Methods, Applications and Hands-on Experience, CAMP, Technische Universität München.
- 2014 3D Pictorial Structures, Max Planck Institute for Intelligent Systems: Perceiving Systems Department.
- 2014 3D Pictorial Structures, University of Maryland, Johns Hopkins University, Princeton University.
- 2013 CVLAB, Ecole Polytechnique Fédérale de Lausanne (EPFL).

Academic Service

- Reviewer CVPR, ICCV, ECCV, ACCV, TPAMI, IJCV, TIP, CVIU, BMVC, MVA, Sensors, IROS, ICRA
- 2015-2018 Organization of the Deep Learning in Medical Image Analysis (DLMIA) Workshop in conjunction with MICCAI.

Other Qualifications

- Volunteering First aider
- Volunteering Evacuation Chair Operator
- Social Events Graduation ceremony organization for the Department of Informatics, TUM. Tag der Informatik & Fest der Absolventinnen und Absolventen 2012.
- Continuous Training Technische Universität München Mentoring Program 2011.
- Interests Running, Photography, Cycling.

Publications and Recent Work

- [1]. Irtiza Hasan, Francesco Setti, Theodore Tsemlis, Vasileios Belagiannis, Sikandar Amin, Alessio Del Bue, Marco Cristani, and Fabio Galasso. Forecasting people trajectories and head poses by jointly reasoning on tracklets and vislets. *arXiv preprint arXiv:1901.02000*, 2019.
- [2]. Nico Engel, Stefan Hoermann, Markus Horn, Vasileios Belagiannis, and Klaus Dietmayer. Deeplocalization: Landmark-based self-localization with deep neural networks. *arXiv preprint arXiv:1904.09007*, 2019.
- [3]. Danail Stoyanov, Zeike Taylor, Gustavo Carneiro, Tanveer Syeda-Mahmood, Anne Martel, Lena Maier-Hein, João Manuel RS Tavares, Andrew Bradley, João Paulo Papa, Vasileios Belagiannis, et al. Deep learning in medical image analysis and multimodal learning for clinical decision support: 4th international workshop, dlmia 2018, and 8th international workshop, ml-cds 2018, held in conjunction with miccai 2018, granada, spain, september 20, 2018, proceedings, 2018.
- [4]. Leslie Casas, Nassir Navab, and Vasileios Belagiannis. Adversarial signal denoising with encoder-decoder networks. *arXiv preprint arXiv:1812.08555*, 2018.
- [5]. Gustavo Carneiro, João Manuel RS Tavares, Andrew P Bradley, João Paulo Papa, Jacinto C Nascimento, Jaime S Cardoso, Zhi Lu, Vasileios Belagiannis, et al. 1st miccai workshop on deep learning in medical image analysis. 2018.
- [6]. Vasileios Belagiannis, Azade Farshad, and Fabio Galasso. Adversarial network compression. In *Computer Vision - ECCV 2018 Workshops - Munich, Germany, September 8-14, 2018, Proceedings, Part IV*, pages 431–449, 2018.
- [7]. Felix Achilles, Federico Tombari, Vasileios Belagiannis, Anna Mira Loesch, Soheyl Noachtar, and Nassir Navab. Convolutional neural networks for real-time epileptic seizure detection. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization*, 6(3):264–269, 2018.
- [8]. M Jorge Cardoso, Tal Arbel, Gustavo Carneiro, Tanveer Syeda-Mahmood, João Manuel RS Tavares, Mehdi Moradi, Andrew Bradley, Hayit Greenspan, João Paulo Papa, Anant Madabhushi, et al. Deep learning in medical image analysis and multimodal learning for clinical decision support: Third international workshop, dlmia 2017, and 7th international workshop, ml-cds 2017, held in conjunction with miccai 2017, québec city, qc, canada, september 14, proceedings, 2017.
- [9]. Vasileios Belagiannis and Andrew Zisserman. Recurrent human pose estimation. In *2017 12th IEEE International Conference on Automatic Face & Gesture Recognition (FG 2017)*, pages 468–475. IEEE, 2017.
- [10]. Nicola Rieke, David Joseph Tan, Chiara Amat di San Filippo, Federico Tombari, Mohamed Alshekhali, Vasileios Belagiannis, Abouzar Eslami, and Nassir Navab. Real-time localization of articulated surgical instruments in retinal microsurgery. *Medical image analysis*, 34:82–100, 2016.

- [11]. Iro Laina, Christian Ruppert, Vasileios Belagiannis, Federico Tombari, and Nassir Navab. Deeper depth prediction with fully convolutional residual networks. In *2016 Fourth international conference on 3D vision (3DV)*, pages 239–248. IEEE, 2016.
- [12]. Gustavo Carneiro, Diana Mateus, Loïc Peter, Andrew Bradley, João Manuel RS Tavares, Vasileios Belagiannis, João Paulo Papa, Jacinto C Nascimento, Marco Loog, Zhi Lu, et al. Deep learning and data labeling for medical applications: First international workshop, labels 2016, and second international workshop, dlmia 2016, held in conjunction with miccai 2016, athens, greece, october 21, 2016, proceedings, 2016.
- [13]. Vasileios Belagiannis, Xinchao Wang, Horesh Beny Ben Shitrit, Kiyoshi Hashimoto, Ralf Stauder, Yoshimitsu Aoki, Michael Kranzfelder, Armin Schneider, Pascal Fua, Slobodan Ilic, et al. Parsing human skeletons in the operating room. *Machine Vision and Applications*, 2016.
- [14]. Vasileios Belagiannis, Sikandar Amin, Mykhaylo Andriluka, Bernt Schiele, Nassir Navab, and Slobodan Ilic. 3d pictorial structures revisited: Multiple human pose estimation. *IEEE transactions on pattern analysis and machine intelligence*, 38(10):1929–1942, 2016.
- [15]. Christoph Baur, Fausto Milletari, Vasileios Belagiannis, Nassir Navab, and Pascal Fallavollita. Automatic 3d reconstruction of electrophysiology catheters from two-view monoplane c-arm image sequences. *International journal of computer assisted radiology and surgery*, 11(7):1319–1328, 2016.
- [16]. Shadi Albarqouni, Christoph Baur, Felix Achilles, Vasileios Belagiannis, Stefanie Demirci, and Nassir Navab. Aggnet: deep learning from crowds for mitosis detection in breast cancer histology images. *IEEE transactions on medical imaging*, 35(5):1313–1321, 2016.
- [17]. Mehmet Yigitsoy, Vasileios Belagiannis, Aleksander Djurka, Amin Katouzian, Slobodan Ilic, E Pernuš, Abouzar Eslami, and Nassir Navab. Random ferns for multiple target tracking in microscopic retina image sequences. In *2015 IEEE 12th International Symposium on Biomedical Imaging (ISBI)*, pages 209–212. IEEE, 2015.
- [18]. Lichao Wang, Vasileios Belagiannis, Carsten Marr, Fabian Theis, Guang-Zhong Yang, and Nassir Navab. Anatomic-landmark detection using graphical context modelling. In *2015 IEEE 12th International Symposium on Biomedical Imaging (ISBI)*, pages 1304–1307. IEEE, 2015.
- [19]. Falk Schubert, Daniele Casaburo, Dirk Dickmanns, and Vasileios Belagiannis. Revisiting robust visual tracking using pixel-wise posteriors. In *Computer Vision Systems: 10th International Conference, ICVS 2015, Copenhagen, Denmark, July 6-9, 2015, Proceedings*, volume 9163, page 275. Springer, 2015.
- [20]. Nicola Rieke, David Joseph Tan, Mohamed Alsheakhali, Federico Tombari, Chiara Amat di San Filippo, Vasileios Belagiannis, Abouzar Eslami, and Nassir Navab. Surgical tool tracking and pose estimation in retinal microsurgery.

- In *International Conference on Medical Image Computing and Computer-Assisted Intervention*, pages 266–273. Springer, Cham, 2015.
- [21]. Christian Nissler, Nikoleta Mouriki, Claudio Castellini, Vasileios Belagiannis, and Nassir Navab. Omg: introducing optical myography as a new human machine interface for hand amputees. In *2015 IEEE International Conference on Rehabilitation Robotics (ICORR)*, pages 937–942. IEEE, 2015.
 - [22]. Vasileios Belagiannis, Christian Rupprecht, Gustavo Carneiro, and Nassir Navab. Robust optimization for deep regression. In *Proceedings of the IEEE International Conference on Computer Vision*, pages 2830–2838, 2015.
 - [23]. F Achilles, V Belagiannis, F Tombari, AM Loesch, JPS Cunha, N Navab, and S Noachtar. Deep convolutional neural networks for automatic identification of epileptic seizures in infrared and depth images. *Journal of the Neurological Sciences*, 357:e436, 2015.
 - [24]. Fausto Milletari, Vasileios Belagiannis, Nassir Navab, and Pascal Fallavollita. Fully automatic catheter localization in c-arm images using l1-sparse coding. In *International Conference on Medical Image Computing and Computer-Assisted Intervention*, pages 570–577. Springer, Cham, 2014.
 - [25]. Vasileios Belagiannis, Xinchao Wang, Bernt Schiele, Pascal Fua, Slobodan Ilic, and Nassir Navab. Multiple human pose estimation with temporally consistent 3d pictorial structures. In *European Conference on Computer Vision*, pages 742–754. Springer, Cham, 2014.
 - [26]. Vasileios Belagiannis, Sikandar Amin, Mykhaylo Andriluka, Bernt Schiele, Nassir Navab, and Slobodan Ilic. 3d pictorial structures for multiple human pose estimation. In *CVPR 2014-IEEE International Conference on Computer Vision and Pattern Recognition*, 2014.
 - [27]. Vasileios Belagiannis, Christian Amann, Nassir Navab, and Slobodan Ilic. Holistic human pose estimation with regression forests. In *International Conference on Articulated Motion and Deformable Objects*, pages 20–30. Springer, Cham, 2014.
 - [28]. Ralf Stauder, Vasileios Belagiannis, Loren Schwarz, Ali Bigdelou, Eric Soehngen, Slobodan Ilic, and Nassir Navab. A user-centered and workflow-aware unified display for the operating room. In *MICCAI Workshop on Modeling and Monitoring of Computer Assisted Interventions (M2CAI)*,, 2012.
 - [29]. Vasileios Belagiannis, Falk Schubert, Nassir Navab, and Slobodan Ilic. Segmentation based particle filtering for real-time 2d object tracking. In *European Conference on Computer Vision*, pages 842–855. Springer, Berlin, Heidelberg, 2012.
 - [30]. Rigas Kouskouridas, Nikolaos Kyriakoulis, Dimitrios Chrysostomou, Vasileios Belagiannis, Spyridon G Mouroutsos, and Antonios Gasteratos. The vision system of the acrobater project. In *International Conference on Intelligent Robotics and Applications*, pages 957–966. Springer, Berlin, Heidelberg, 2009.

- [31]. Rigas Kouskouridas, Vasileios Belagiannis, Antonios Gasteratos, Nikolaos Kyriakoulis, Dimitrios Chrysostomou, Alexandros Iosifidis, Evaggelos Karakasis, Efthimios Badekas, and Spyridon G Mouroutsos. Intelligent integrated vision system for indoor robotics applications. *5th*, 2009.
- [32]. Vasileios Belagiannis and Antonios Gasteratos. A real-time visual detection and tracking system. In *3rd Pan-Hellenic Student Conference in Informatics*, 2009.