Viktoriia Sharmanska, PhD | lastname.v at gmail.com | lovevisiondata.wix.com/viktoriia

Employment

- Jul 2022- Senior Research Engineer/Computer Vision Lead, ContexAI, London, UK.
- Sep 2020- Lecturer in Artificial Intelligence, University of Sussex, UK.
- Apr 2021- Honorary Lecturer, Imperial College London, UK.
- 2017 2020 Imperial College Research Fellow, *Imperial College London, UK*, Project: Deep Understanding of Human Behaviour from Video Data: Action plus Emotion Approach, Success rate 10%.
- 2016 2017 Maternity break.

Education

- Sep 2010 PhD in Computer Vision and Machine Learning, Institute of Science and Technology Austria.
 - Jun 2015 Thesis: Learning with attributes for object recognition: parametric and non-parametric views.
- Sep 2003 MSc in Applied Mathematics, Taras Shevchenko National University of Kyiv, Ukraine.
- Jun 2009 summa cum laude

Professional Activities

- 2023 Area Chair, International Conference on Learning Representations (ICLR).
- 2021 Area Chair, IEEE Conference on Computer Vision and Pattern Recognition (CVPR).
- 2021 Engagements Chair, International Conference on Learning Representations (ICLR).
- 2019-2021 Area Chair, International Conference on Learning Representations (ICLR).
- 2013-now Reviewer, CVPR, ICCV, ECCV, NeurIPS, ICML, ICLR, IJCAI, AAAI, CVWW 2013-2015, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), IEEE Transactions on Affective Computing, Journal of Artificial Intelligence Research (JAIR).
- Jun 2022 Co-chair, Workshop 3rd Workshop and Competition on Affective Behavior Analysis in-the-wild (ABAW), held in conjunction with the IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2022.
- Jun 2018 Co-chair, Workshop Women in Computer Vision Workshop, held in conjunction with the IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2018.
- Jul 2016 Co-chair, Workshop BeyondLabeler Human is More Than a Labeler, at the International Joint Conference on Artificial Intelligence, IJCAI 2016.

Honors & Awards

- 2019 **Outstanding Reviewer Award**, *IEEE Conference on Computer Vision and Pattern Recognition*, (CVPR).
- 2018 Education Research Grant, 10K\$ Amazon AWS credit, Project on deep learning for action plus emotion recognition from video data.
- 2017 Education Research Grant, NVIDIA GPU Grant.
- 2017 Imperial College Research Fellowship, £150K.
- 2016 Young Researcher Award, Conference on Computer Vision and Pattern Recognition (CVPR).
- 2014 2019 Travel award, Women in Computer Vision Workshop (WiCV), Women in Machine Learning Workshop (WiML).

- 2016 Education Research Grant, 7.5K\$ Amazon AWS credit, Project on deep convolutional neural networks for video data analysis.
- 2014 Google Travel award, Neural Information Processing Systems (NeurPS).
- 2013 Travel award, Uncertainty in Artificial Intelligence (UAI).
- 2012 Finalist, Google Anita Borg Scholarship.
- 2008 2009 Winner, V.M. Glushkov Scholarship.

This scholarship is awarded to two students with the highest grades and social activities at the faculty of cybernetics, Taras Shevchenko National University of Kyiv.

Student Supervision

- 2021 now **Co-supervisor** to PhD student Yeat Jeng Ng (started 2020) at the Department of Informatics, University of Sussex, UK.
- 2018 now **Supervisor** to PhD student Michail Doukas (started 2018) at the Department of Computing, and second-supervisor to Barbara Metzler (started 2020) at the School of Public Health, Imperial College London, UK.

Teaching Activities

- 2020-2022 **Convenor**, Neural Networks (undergraduate level, 80 students), Machine Learning (postgraduate level, 150 students), University of Sussex, UK.
- 2019-2022 **Convenor**, Ethics, Privacy, Al in Society (postgraduate level, 60 students), Imperial College London, UK.
- 2018-2020 Organizer, Machine Learning tutorials, postgraduate level, Imperial College London.
- 2016-2019 Deep Learning, invited lectures in the Computer Vision, Machine Learning, and Neural Networks modules, undergraduate and postgraduate level, University of Sussex, UK (12 hours).
 - 2018 Lviv data science summer school, lectures on Introduction to Computer Vision, Computer Vision for video understanding and Interpretability of automated decisions, UCU, Ukraine (4 hours).
- 2013, 2014 Teaching assistant, Statistical Machine Learning, Image Processing and Analysis, IST Austria.

Research Experience

- 2013 Visiting Researcher, *Machine Learning Group*, NICTA Sydney Research Laboratory, Australia, Collaborating with Prof. Tiberio Caetano.
- 2013 Visiting Student, *Computer Vision Group*, University of Texas at Austin, USA, Collaborating with Prof. Kristen Grauman.
- 2012 2013 Visiting Student, *Machine Learning Group*, University of Cambridge, UK, Collaborating with Prof. Zoubin Ghahramani.

List of publications

In computer science, different to most other areas of science, the most prestigious way is to publish in conference proceedings; these are peer-reviewed and refereed. Computer Vision and Pattern Recognition (CVPR), International Conference on Computer Vision (ICCV), and European Conference on Computer Vision (ECCV) are the top 3 conferences in Computer Vision and Pattern Recognition. Neural Information Processing Systems (NeurIPS) and International Conference on Machine Learning (ICML) are the top 2 conferences in Machine Learning. International Conference on Learning Representations (ICLR) is the top conference in deep learning.

- 2022 Sara Romiti, Christopher Inskip, Viktoriia Sharmanska, Novi Quadrianto, *RealPatch: A Statistical Matching Framework for Model Patching with Real Samples*, European Conference on Computer Vision (**ECCV**).
- 2022 Tetiana Martyniuk, Orest Kupyn, Yana Kurlyak, Igor Krashenyi, Jiri Matas, Viktoriia Sharmanska, DAD-3DHeads: A Large-scale Dense, Accurate and Diverse Dataset for 3D Head Alignment from a Single Image, Conference on Computer Vision and Pattern Recognition (CVPR).
- 2021 Michail C. Doukas, Stefanos Zafeiriou, Viktoriia Sharmanska, *HeadGAN: One-shot Neural Head Synthesis and Editing*, International Conference on Computer Vision (ICCV).
- 2021 Michail C. Doukas, Mohammad Rami Koujan, Viktoriia Sharmanska, Anastasios Roussos, Stefanos Zafeiriou, *Head2Head++: Deep Facial Attributes Re-Targeting*, IEEE Transactions on Biometrics, Behavior, and Identity Science (TBIOM).
- 2020 Viktoriia Sharmanska, Lisa Anne Hendricks, Trevor Darrell, Novi Quadrianto, *Contrastive Examples for Addressing the Tyranny of the Majority*, arXiv:2004.06524.
- 2020 An Hoai Truong, Viktoriia Sharmanska, Clara Limback-Stanic, Matthew Grech-Sollars, *Optimisation of deep learning methods for visualisation of tumour heterogeneity and brain tumour grading through digital pathology*, Neuro-Oncology Advances, Volume 2, Issue 1.
- 2019 Novi Quadrianto, Viktoriia Sharmanska, Oliver Thomas *Discovering Fair Representations in the Data Domain*, Conference on Computer Vision and Pattern Recognition (**CVPR**), USA.
- 2019 Dimitrios Kollias, Viktoriia Sharmanska, Stefanos Zafeiriou, *Face Behavior a la carte: Expressions, Affect and Action Units in a Single Networks*, arXiv:1910.11111, patent pending.
- 2019 Michail C. Doukas, Viktoriia Sharmanska, Stefanos Zafeiriou, *Video-to-Video Translation for Visual Speech Synthesis*, arXiv:1905.12043.
- 2017 Novi Quadrianto and Viktoriia Sharmanska, *Recycling Privileged Learning and Distribution Matching for Fairness*, Conference on Neural Information Processing Systems (**NeurIPS**), USA.
- 2017 Viktoriia Sharmanska and Novi Quadrianto, *In the Era of Deep Convolutional Features: Are Attributes still Useful Privileged Data?* Visual Attributes, Rogerio Feris, Devi Parikh, Christoph H. Lampert (Eds.), Springer.
- 2016 Viktoriia Sharmanska and Novi Quadrianto, Learning from the Mistakes of Others: Matching Errors in Cross Dataset Learning, Conference on Computer Vision and Pattern Recognition (CVPR), spotlight (9.7% acceptance rate), USA.
- 2016 Viktoriia Sharmanska*, Daniel Hernández-Lobato*, Miguel Hernández-Lobato, Novi Quadrianto, Ambiguity Helps: Classification with Disagreements in Crowdsourced Annotations, Conference on Computer Vision and Pattern Recognition (CVPR), USA.
- 2016 Joseph Taylor, Viktoriia Sharmanska, Kristian Kersting, David Weir, Novi Quadrianto, *Learning using Unselected Features (LUFe)*, International Joint Conference on Artificial Intelligence (IJCAI), USA.
- 2016 Viktoriia Sharmanska and Novi Quadrianto, *Learning using Privileged Information*, Encyclopedia of Machine Learning and Data Mining, Claude Sammut and Geoff Webb (Eds.), Springer.
- 2015 Anastasia Pentina, Viktoriia Sharmanska, Christoph Lampert, *Curriculum Learning of Multiple Tasks*, Conference on Computer Vision and Pattern Recognition (**CVPR**), USA.
- 2014 Daniel Hernández-Lobato, Viktoriia Sharmanska, Kristian Kersting, Christoph Lampert, Novi Quadrianto, Mind the Nuisance: Gaussian Process Classification using Privileged Noise, Conference on Neural Information Processing Systems (NeurIPS), Canada.
- 2014 Viktoriia Sharmanska, Novi Quadrianto, Christoph Lampert, *Learning to Transfer Privileged Information*, arXiv:1410.0389.
- 2013 Viktoriia Sharmanska, Novi Quadrianto, Christoph Lampert, *Learning to Rank Using Privileged Information*, International Conference on Computer Vision (ICCV), Australia.

- 2013 Novi Quadrianto, Viktoriia Sharmanska, David A. Knowles, Zoubin Ghahramani *The Supervised IBP: Neighbourhood Preserving Infinite Latent Feature Models*, Uncertainty in Artificial Intelligence (**UAI**), USA.
- 2012 Viktoriia Sharmanska, Novi Quadrianto, Christoph Lampert, *Augmented Attribute Representations*, European Conference on Computer Vision (**ECCV**), Italy.