

Vitali Petsiuk

CONTACT INFORMATION	Department of Computer Science Boston University Boston, MA, USA	Web: cs-people.bu.edu/vpetsiuk Email: vpetsiuk@bu.edu
RESEARCH INTERESTS	Computer Vision, Deep Learning, Machine Learning. I'm interested in making Machine Learning models more interpretable and robust. I work on incorporating explanations into existing models to better understand and improve them, but I'm also interested in making inherently interpretable systems.	
EDUCATION	Boston University , Boston, MA, USA Ph.D. Computer Science Research Topic: <i>Explainable Artificial Intelligence</i> Advisor: Prof. Kate Saenko	2017 – present
	Belarusian State University , Minsk, Belarus BS and MS, <i>cum laude</i> . Computer Science and Applied Math. Research projects: Lung X-Ray and CT scans segmentation using Deep Learning. Advised by Prof. Alexander Tuzikov Complexity analysis for the generalization of Well-Covered Graphs class. Advised by Prof. Yury Orlovich	2012 – 2017
	Yandex School of Data Analysis , Minsk/Moscow Master's Level Program. Selected Graduate Coursework: Algorithms and Data Structures, Machine Learning, Deep Learning, Image Processing, Probability Theory, Information Theory, Complexity Theory.	2014 – 2016
WORK EXPERIENCE	Adobe , Document Intelligence Lab, Machine Learning Intern. Eminent Systems , Software Engineer, C++. Implemented parallel algorithms for an image processing library. of medical and industrial 2D and 3D images using OpenCL. DAAD supported exchange project Mannheim University of Applied Sciences, Germany. Implemented 3D SURF algorithm and it's parallel version using OpenCL. Lyceum of BSU , System Administrator Assistant. Hardware and software support of school machines.	Summer 2019 2015 – 2017 September 2016 2013 – 2014
PUBLICATIONS	<ul style="list-style-type: none">[1] Petsiuk V., Manjunatha V., Morariu V., Ordonez V., Mehra A., Jain R. Black-box Explanation of Object Detectors via Saliency Maps. <i>In submission</i>[2] Petsiuk V., Das A., Saenko K. RISE: Randomized Input Sampling for Explanation of Black-box Models. British Machine Vision Conference (BMVC), 2018. Oral.[3] Bargal S. A.*, Zunino A.*, Petsiuk V., Zhang J., Saenko K., Murino V., Sclaroff S. Guided Zoom: Questioning Network Evidence for Fine-grained Classification. British Machine Vision Conference (BMVC), 2019. Oral.[4] Plummer B. A., Vasileva M. I., Petsiuk V., Saenko K., Forsyth D. Why do These Match? Explaining the Behavior of Image Similarity Models.	

In submission.

PROFESSIONAL ACTIVITIES	Research talk at Machine Intelligence Community Conference, MIT, Boston, USA.	2018
	Research talk at The University of Cambridge, Cambridge, UK.	2018
	Demo at ECCV 2018 on saliency maps for image retrieval.	2018
	Reviewer for WACV 2020.	2019
	Helped organize IAP class on Interpretable ML. MIT, Boston, USA.	2020
TEACHING EXPERIENCE	Grader for CS542 Machine Learning.	Fall 2018
	Grader for CS591 S1 Deep Learning.	Spring 2020
VOLUNTEERING	Technical advisor for AI4ALL program.	May 2019
TECHNICAL SKILLS	Python, C++, PyTorch, Keras, OpenCV, sklearn, Linux.	