

Image Processing for Art Investigation Workshop 2018 Program

June 21-22, 2018

Auditorium of the Museum of Fine Arts (MSK) in Ghent
Fernand Scribedreef 1, 9000 Ghent, Belgium

Thursday June 21, 2018				
Start time	End time	Authors	Title	
8:30	9:00	Registration		
9:00	9:10	Conference welcome and logistics		
Plenary			Chair: I. Daubechies	
9:10	10:00	John Delaney	Multi-modal imaging spectroscopy of paintings and illuminated manuscripts	
Session 1 Combining different imaging modalities to uncover hidden features in paintings			Chair: A. Pizurica	
10:00	10:20	Zahra Sabetsarvestani, Francesco Renna, Franz Kiraly, and Miguel Rodrigues	Un-mixing X-ray images with the application in art investigation	
10:20	10:40	Jan Blažek, and Barbara Zitová	Information separation in art investigation: A survey	
10:40	11:00	Shaoguang Huang, Bruno Cornelis, Bart Devolder, and Aleksandra Pizurica	Paint loss detection via kernel sparse representation	
11:00	11:20	Coffee break		
Session 2 Image processing for Photography			Chair: S. Jaffard	
11:20	11:50	Patrice Abry	Anisotropic multiscale representations for an automated and reproducible analysis and classification of photographic paper	
11:50	12:20	Henri Maitre	Automatic appreciation of aesthetics in photography: Where are we going?	
12:20	13:40	Lunch		
13:40	13:50	Group picture		
Session 3 Poster pitches			Chair: L. Platias	
13:50	13:55	Marie d'Autume, and Enric Meinhardt-Llopis	Disrobing Adam and Eve with the linear osmosis model	
13:55	14:00	Ana Martins	"NO CHAOS, DAMN IT!" Extracting paint maps from Macro-X-Ray Fluorescence scanning data to deconstruct Jackson Pollock's "action painting" in Number 1A, 1948	
14:00	14:05	Rasha Ahmed Shaheen, Mona Fouad Ali, Medhat El-Dabaa	Documentation and digitalizing of royal albumen photographic collection of King Farouk, dating from the 19th Century	
14:05	14:10	Gjorgji Strezoski, and Marcel Worring	OmniArt: A large scale artistic benchmark	
Session 4 Imaging tools for artwork diagnostics			Chair: M. Martens	
14:10	14:40	Hélène Dubois	The conservation of the brothers van Eyck's Ghent Altarpiece	
14:40	15:10	Ella Hendriks	Transforming conservation	
Session 5 New initiatives and collaborations			Chair: M. Rodrigues	
15:10	15:40	Daniele Zavagno	The Visual Science of Art conference: History and aims	
15:40	16:00	Collaborative projects		
		Massimo Fornasier	Mantegna Project 4.0: Some novel directions over the work done in the Mantegna Project	
		Miguel Rodrigues	Transforming art study, conservation, preservation, and presentation via digital technology	
16:00	Coffee			
16:00	17:00	Session 6 Posters & Demonstrators		Chair: L. Platias
		Poster presentations	<i>Corresponding to the pitch presentations from Session 3</i>	
		Demonstrators		
		Laurens Meeus	Fast and accurate paint loss detection using deep learning	
		Gjorgji Strezoski	ArtSight: A visual artistic data exploration engine	
		Roman Sizyakin	Detection of cracks in paintings using deep learning	
17:00	17:30	Visit to the Ghent Altarpiece restoration studio at the MSK		
Evening program				
17:30	19:00	Boat & walking tour through the heart of Ghent		
19:00	22:00	Conference dinner		
		Evening presentation by Ingrid Daubechies: Reunited: a digital and art-historical adventure		

Friday June 22, 2018

Start time	End time	Authors	Title
Session 7 Imaging as a tool in understanding creation of the artwork			
Chair: P. Abry			
9:00	9:30	Koen Janssens	Paintings' alternations in the past and in the future: Non-invasive X-Ray based imaging of subsurface information and how to improve upon it
9:30	9:50	Barak Sober	Iron age Hebrew epigraphy in the silicon age - An algorithmic approach to study Paleo-Hebrew inscriptions
9:50	10:10	R. van Lieke, K.J. Batenburg, A. Kostenko, C. L. Wang, and I. Garachon	Imaging ancient Chinese ivory puzzle balls: deducing the make Process
10:10	10:30	Ellen van Bork, and Bruno Cornelis	The Monitoring of Cracks in Historical Silver with Image Processing Techniques
10:30	10:50	Coffee break	
Session 8 Frescoes			
Chair: E. Hendriks			
10:50	11:20	Dubravka Đukanović and Siniša Zeković	The renovation and protection of the rich cultural and artistic heritage of the Hilandar monastery
11:20	11:50	Massimo Fornasier	The Mategna frescoes in Padua: Computer assisted puzzle solving and recolorization
11:50	12:10	Simone Parisotto, Luca Calatroni, and Claudia Daffara	Mathematical osmosis imaging for multi-modal and multi-spectral applications in cultural heritage conservation
12:10	13:30	Lunch	
Session 9 Virtual restoration			
Chair: M. Fornasier			
13:30	14:00	Carola-Bibiane Schönlieb	Unveiling the invisible - mathematical approaches for virtual image restoration
14:00	14:20	Nanne van Noord and Eric Postma	Pixel context encoders for painting region inpainting
Session 10 Deep learning techniques for digital artwork analysis			
Chair: K. Janssen			
14:20	14:40	Laurens Meeus, Shaoguang Huang, Bart Devolder, Maximiliaan Martens, and Aleksandra Pizurica	Deep learning for paint loss detection: A case study on the Ghent Altarpiece
14:40	15:00	Roman Sizyakin, Bruno Cornelis, Laurens Meeus, Maximiliaan Martens, Viacheslav Voronin, and Aleksandra Pizurica	A Deep Learning Approach to Crack Detection in Panel Paintings
15:00	15:30	Eric Postma	Improving the reliability of CNNs for digital artwork analysis
15:30	15:40	Closing remarks	