



EDINBURGH CENTRE FOR
ROBOTICS

CDT Student Conference
Wednesday 7th June 2017
Lady Margaret Hall, Oxford

- 10:00 – 10:05 **Welcome – Niki Trigoni – CDT Director (AIMS)**
- Keynote Talk**
- 10:05 – 10:50 Andrea Vedaldi, Department of Engineering Science, University of Oxford – Understanding images using modern deep neural networks
- Session chair: Luke Cramphorn**
- 10:50 – 11:10 Adam Cobb – *Understanding the behaviour of agents from their trajectories*
- 11:10 – 11:30 Christian Rauch & Maurice Fallon – *Visual articulate tracking for humanoid manipulation*
- 11:30 – 11:50 **Break**
- Session chair: James Garforth**

11:50 – 12:10	Simon Jones – <i>Evolving behaviour trees for swarm robotics</i>
12:10 – 12:30	Leo Berrada, Andrew Zisserman & Pawan Mudigonda – <i>Trusting SVM for piecewise linear CNNs</i>
12:30 – 12:50	Simona Nobili & Maurice Fallon – <i>Laser-based perception for robust localization of dynamic robots</i>
12:50 – 13:30	Lunch
	Session chair: Dave Pollard
	Keynote Talk
13:30 – 14:15	Rich Walker, Shadow Robot Company, Managing Director – <i>Innovation and robotics – an SME view</i>
14:15 – 14:35	Luke Cramphorn & Nathan Lepora – <i>Tactile manipulation through biomimetic touch</i>
14:35 – 14:55	Ivan Kiskin – <i>Mosquito detection with neural networks: The buzz of deep learning</i>
14:55 – 15:25	Poster talks (2 mins per person) <ul style="list-style-type: none"> • Ankush Gupta • Kirsty Aquilina, David A.W. Barton & Nathan F Lepora • Boris Mocialov, Helen Frances Hastie, Patricia Vargas & Graham Turner • Chongjing Cao & Andrew Conn • Zeke Steer • Katie Winkle • Cara Williamson • Daniel Gordon, Graham Henderson & Sethu Vijayakumar • Chanelle Lee, Jonathan Lawry & Alan Winfield • Marian Andrecki & Nicholas KenelmTaylor • Wolfgang Merkt • Georgi Tinchev
15:25 – 15:55	Break and Poster Session
	Session chair: Wolfgang Merkt
15:55 – 16:15	Teun Krikke, Frank Broz & David Lane – <i>A comparative study of non-negative matrix factorisation and deep learning techniques</i>

16:15 – 16:35	Kiyan Maheri – <i>An adaptive modular recurrent cerebellum-inspired controller</i>
16:35 – 16:55	Rowan Border – <i>Inferring surface geometry from point clouds for next best view (NBV) planning</i>
16:55 – 17:15	Jose Luis Part & Oliver Lemon – <i>Towards a framework for teaching robots through situated interactive dialogue and visual demonstrations</i>
17:15 – 17:35	Miguel Lagunes-Fortiz, Walterio Mayol-Cuevas & Dima Damen – <i>Towards in-situ on-line object recognition using CNNs</i>
	Session chair: Oliver Bartlett
17:35 – 17:55	<i>Industry Panel Q&A “Real Industrial Research Challenges”</i> <ul style="list-style-type: none"> • <i>Rich Walker, Shadow Robot Company, Managing Director</i> • <i>Alison Lowndes, nVidia</i> • <i>Brian Song, Samsung</i>
18:00 – 21:00	<i>Drinks & Buffet – Talbot Hall</i>