

Workshop on Visual guidance systems for small autonomous aerial vehicles

8h45	Welcome
Optic flow sensors (Chair : N. Franceschini)	
9 h 00	<i>Guest Lecturer</i> D. O'Carroll (Univ. Adelaide,) : Biomimetic and bio-inspired motion detectors based on insect vision.
9 h 40	G. Barrows (Centeye Inc., USA) : Minimalist Vision Sensors for Micro Air Vehicles
10 h 00	S. Fuller (Caltech, USA) : Reichardt Correlators observing a constructed environment
10 h 20	S. Liu (ETHZ, Zurich) : A time-of-travel motion detection chip for steering autonomous robots
10 h 40	Coffee Break
Control and self-localisation (Chair : S. Violette)	
11h00	G. Conte (Linköping Univ., Sweden) : A GPS Independent Navigation System for UAVs
11h20	T. Hamel (I3S, Nice) : Advanced flight control for VTOL UAV using Image-based control paradigm
11h40	C. Taylor (Brigham Young Univ., USA) : Using Vision to Improve MAV Pose Estimation
12h00	L. Derafa (LISV, Paris/Algiers) : Real-Time Motion Detection and Tracking in Aerial Video
12h20	D. Burschka (Munich Univ.) : Monocular Vision-Based Navigation Strategies for Small Autonomous Aerial Vehicles.
12h40	S. Bouabdallah (ETHZ, Zurich), S. Grzonka (Freiburg) : Towards a Fully Autonomous Indoor Helicopter.
13h00	Lunch Break
Optic flow-based control strategies (Chair : F. Ruffier)	
14h30	J. Serres (CNRS/Univ. Marseille) : A bio-inspired optic flow based autopilot for guiding a miniature hovercraft in corridors.
14h50	S. Humbert (Univ. Maryland) : Wide-Field Integration of Optic Flow for Corridor Navigation on a Micro Helicopter.
15h10	J. C. Zufferey (EPFL, Lausanne) : Optic flow to control small UAVs.
15h30	R. Lozano (Compiègne Univ., France) : Real-time stabilization of an Eight-Rotor UAV using Optical flow
15h50	R. Mahony (ANU, Australia) : Analysis of the closed-loop flight dynamics of aerial vehicles given proportional feedback of optic flow measurements
16h10	Coffee Break
Landing, Docking and Tracking (Chair : J. C. Zufferey)	
16h30	L. Matthies (JPL, USA) : Vision Systems for Planetary Landers
16h50	Y. Watanabe (ONERA, France) : Research Perspectives in UAV Visual Target Tracking in Uncertain Environments
17h10	Y. Measson (CEA-LIST, France) : Survey of CEA LIST activities in the field of UAV
17h30	E. Baird (Lund Univ., Sweden) : A visual strategy for landing on a vertical surface
17h50	S. Krupinski (Cybernetix, France) : Localisation and guidance in the AUV docking problem
18h10	Conclusion (S. Violette and F. Ruffier)