



COST

The European Network on Integrating Vision and Language IC1307

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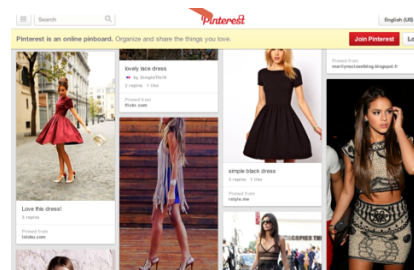


Scientific context and objectives (1/2)

- **Background / Motivation:**
 - Explosive growth of textual and visual data - urgent needs relating to data management, accessibility, processing and search.
 - Technological advances, e.g. robot interaction with world and users.
 - Accessibility issues: people with disabilities excluded from the digital revolution.



These are **south American sea lions** off the coast of Patagonia. They can't give birth while swimming, as **whales and dolphins** do, but have to come ashore.



Scientific context and objectives (2/2)

- **Action's main objective:**
 - To create an interdisciplinary European vision-language research network targeting scientific advances and societal benefits in four focus themes.
- **Research directions:**
 - Advancing theory, methodology and real-world technology across the language-vision spectrum, but particularly in the iV&L Net focus research themes.
 - Facilitating collaboration, networking and interdisciplinary community building.
 - Liaising with industry and end-users.
 - Coordinating the development of benchmark data resources for tasks relating to the focus themes.
 - Specifying grand challenges and organising corresponding shared-task competitions relating to the focus themes.

Working groups

1. WG1 Integrated Modeling of Vision and Language for CV and NLP Tasks
2. WG2 Applications of Integrated Models
3. WG3 Automatic Generation of Image and Video Descriptions
4. WG4 Semantic Image and Video Search
5. WG5 Industry and End-User Liaison

Outreach – Impact (1/4)

- Management Committee comprising representatives from 28 countries
- More than 400 members, including international members (from US and Australia)
- Achieved a 60:40 gender balance (male:female)
- Achieved ~30% participation of/activity in Inclusiveness Countries
- Achieved ~30% participation of early-career researchers
- Fully balanced participation from Vision and Language Communities
- 35 Short-Term-Missions (mobility of early-career Researchers)

Outreach – Impact (2/4)

- **3 Training Schools**

2015 – KU Leuven, Belgium, focus on introduction to Computer Vision and Natural Language Processing fields (~70 participants)

2016 – University of Malta, focus on Deep Learning for vision and language with rich industrial presence (~120 participants)

2017 – Cognitive Systems Research Institute, Athens, Greece, focus on vision and language integration in Cognitive Robotics (~ 80 participants)

- **1 Conference (VL'18, Tartu, Estonia)**

- **6 Workshops with proceedings**

VL '14 at COLING 2014, Dublin, Ireland

VL '15 at EMNLP 2015, Lisbon, Portugal

VL '16 at ACL 2016, Berlin, Germany

VL '17 at EACL 2017, Valencia, Spain

NLG '15, Brighton, UK

iV&L-MM, ACM Multimedia and ECCV 2016, Amsterdam, The Netherlands

Outreach – Impact (3/4)

- Organised more than 8 challenges (shared tasks on Multimodal Machine Translation and Activity Recognition)
- Developed 12 datasets
- Contributed to standards on spatial image annotation
- Produced multi-participant journal publications on related state of the art
- Interacted with more than 40 related projects internationally
- Enabled bilateral cooperation for research in the form of reading groups leading to joint papers and collaboration in R&D proposals.
- Achievement: Selected for Organising a Dagstuhl Seminar in early 2019

Outreach – Impact (4/4)

- Being an interdisciplinary Action involving Computer Vision and Natural Language Processing, we managed to reach to TWO more research communities, both highly interdisciplinary:
 - Multimedia
 - Cognitive Robotics