A Research Roadmap for Cognitive Vision Systems

Proposed Outline Structure

Note: in the following, numbers in brackets indicate the maximum planned length in pages.

- 1. Executive Summary (1)
- 2. Introduction (3)
 - 2.1 The scope of cognitive vision: what it is and why it is important
 - 2.2 The embryonic and pre-paradigmatic status of cognitive vision
 - 2.3 The nature, purpose, and scope of the cognitive vision systems roadmap.
- 3. Obstacles to Progress (2)
 - 3.1 Unchartered territory: the currently ill-posed nature of cognition and cognitive vision
 - 3.2 Multi-disciplinarity
 - 3.3 Historic aversion/inability in computer vision to deploying the scientific method whereby an empirical body of knowledge emerges that can be built on by others.
- 4. The Scientific Context: Overcoming Obstacles (7)
 - 4.1 External influence on the field of cognitive vision
 - 4.2 Enabling technologies
 - 4.3 Advances in related disciplines
- 5. The Nature and Scope of Cognitive Vision (7)
 - 5.1 Functional capabilities of cognitive vision
- 6. Research Paradigms: Meeting the Capability Challenge (8)
 - 6.1 Survey of existing and emerging paradigms in cognition and cognitive vision
 - 6.2 Discussion of the way in which each paradigm might achieve each capability
- 7. Scientific Issues (2)
 - 7.1 Core scientific goals and technological problems to be addressed
- 8. A Research Roadmap A Schedule of Priority Topics (3)
 - 8.1 Topics, motivation, method, impact, timing.
 - 8.2 Resource implications
 - 8.3 Leveraging impact though synergy with existing EU and national programmes.
- 9. Summary (2)

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