
PhD position (M/F) – Thesis offer

(Reference: DS_BH_PhD_MeMad_042018)

Research topics	Deep Multimodal Models for Empowering Audio-Visual StoryTelling
Department	Data Science
Parution date	16/04/2018
Start date	ASAP
Duration	Duration of the thesis (3 years)
Description	<p>The overall objective of this research program is to develop novel methods and tools for digital storytelling. To his aim, an improved scientific understanding of multimodal media content analysis, linking and consumption will be developed. This PhD program addresses more specifically the following topics:</p> <ul style="list-style-type: none">• Combine the best available knowledge in machine processing, machine learning and human editing of verbal description, to industrialise the process of digital storytelling and re-use and re-purposing of existing media as new resources by both the media producers and the media consumers.• Develop state of the art techniques for analyzing audio-visual content (including text), so that multimodal data can be extensively described. The extracted descriptions will serve to structure and annotate semantically large archives of audiovisual data and to better understand their content and evolution.• Study and implement temporal segmentation approaches that take context and content into account in order to define in a precise and localized way (temporally and possibly spatially) the semantic fragmentation of audio-visual documents• Investigate and evaluate automatic methods for detecting key moments and identifying relevant hyperlinks in audio-visual contents in the context of the project and in International benchmarking events. <p>This PhD position is funded by the MeMAD H2020 European project: www.memad.eu. MeMAD stands for Methods for Managing Audiovisual Data and aims to develop automatic language-based methods for managing, accessing and publishing pre-existing and originally produced Digital Content in an efficient and accurate manner within the Creative Industries, especially in TV broadcasting and in on-demand media services. “Digital Content” contains audiovisual material along with various ‘ancillary’ texts such as captions, descriptions in different languages, and hyperlinks to related content, similar to what hypertext is to plain text. More specifically MeMAD aims to develop methods and models for producing enhanced digital audiovisual information in multiple languages and for various use contexts and audiences, and to industrialize these results with demonstrable proofs of concept. These objectives will be implemented through a number of work-packages and project-wide use cases which will also serve as additional ways to measure our success in reaching the objectives and expected impacts.</p>



Requirements	Education Level / Degree: MSc (with distinction) Field / specialty: Computer Science Technologies: Machine Learning / Deep Learning / Computer Vision / A.I. Languages / systems: English and French
Application	The position is available immediately, The cutoff date for the application is June 30, 2018, but the application evaluation will start immediately, so you are encouraged to apply before this date. Interested individuals should submit (I, II and III): <ul style="list-style-type: none">• I-Curriculum Vitae• II-Motivation letter including research and education perspectives• III-Two or more reference letters Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference: DS_BH_PhD_MeMad_042018
Postal address	CS 50193 - 06904 Sophia Antipolis, France
Contact	secretariat@eurecom.fr
Fax number	+33 4 93 00 82 00

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EURECOM deploys its expertise around three major fields: Digital Security, Data Science and Communication Systems. EURECOM is particularly active in research in its areas of excellence while also training a large number of doctoral candidates. Its contractual research is recognized across Europe and contributes largely to its budget.

Thanks to its strong ties set up with the industry, EURECOM was awarded the "Institut Carnot" label jointly with the Institut Telecom right from 2006. The Carnot Label was designed to develop and professionalize cooperative research. It encourages the realization of research projects in public research centers that work together with socioeconomic actors, especially companies.