



Ana García del Molino, PhD

During my Ph.D. I worked on visual understanding and personalization for consumer video summarization. I aspire to design AI's to solve societal needs. My research interests also include video content analysis and generative models for image transformation.

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Professional Experience



📍 BIGO Tech., Singapore
📅 April 2019-Today
🕒 Sr. AI Algorithm Engineer

DCNNs to predict PCA parameters for graphic 3D modeling.

GANs for face expression manipulation.

DCNN-based autoencoders and U-Nets for image and video refinement and style transfer.

VAE · GAN · Face Landmark Detection and Tracking · Style Transfer · 3D Rendering

Python · TensorFlow · PyTorch · C# · Blender



📍 I2R, A*STAR, Singapore
📅 2014-March 2019
🕒 Ph.D. Candidate
👤 Supervised by Joo-Hwee Lim

📄 Visual Understanding and Personalization for an Optimal Recollection Experience

🔍 📄 Modeling of lifelog photo-stream sequences using LSTM networks, to detect daily activities and learn associations between life events.

🔍 📄 Use of conditional random fields and probabilistic inference for interactive video summarization with diversity and query-driven objectives.

📄 Use of image quality analysis and semantic retrieval techniques for query-based lifelog summarization.

Object Detection · Activity Recognition · Facial Recognition · Transfer Learning · Spatio-Temporal Learning with LSTM · Episodic Memory

MATLAB · Caffe · Python · TensorFlow · C++ · Prototyping



📍 gifs.com, Zurich
📅 Summer 2017
🕒 Research Consultant

📄 Use of a deep ranking model with personalizable input to customize the highlight detection in videos.

Action Classification · Recommendation Systems · Pattern Recognition · Action Understanding

Python · TensorFlow · DataFrames · SQL · Prototyping

📍 National Inst. of Informatics, Tokyo
📅 2013
🕒 Research Intern

Extension of the Bag of Words instance search technique by geometric coding and quantization error compensation.

Object Detection and Retrieval · SURF & SIFT Descriptors · Hamming Embedding · Bag of Words

MATLAB · C++ · OpenCV

Education and Skills



PhD. in Cognitive Systems and Visual Computing

📍 School of Computer Science and Engineering
📅 2015-2019



BSc. and MSc. in Telecomm Engineering

📍 TelecommBCN (ETSETB)
📅 2008-2013

🇪🇸 Native Speaker

🇪🇸 Native Speaker

🇬🇧 Fluent

🇫🇷 Fluent

🇩🇪 Beginner

💻 Proficient in Matlab, Python, TensorFlow, OpenCV. Linux user. Git version controlling, etc.

⚓ I enjoy sailing, the cinema and the opera, playing board games... And I make earrings!

Make the most of your hobbies! I was a sailing instructor in Barcelona the summers of '08 to '12.

Commitment to the community. I am the leader of the LeanIn Circle "AI Singapore". As a student I was: Vice-President of the IEEE Barcelona Student Branch in 2011-2013; Member of the School's Evaluation Committee and Board; intern at the International Student Office.

Honors and Awards



Obra Social "La Caixa" 📅 2014

Private fellowship to support postgraduate studies in North America and Asia-Pacific.



SINGA Scholarship 📅 2015

Award given by A*STAR to international students to pursue their PhD at a Singapore University.

Selected Publications

- 📄 **Ana Garcia del Molino**, Joo-Hwee Lim, and Ah-Hwee Tan. 2018. Predicting Visual Context for Unsupervised Event Segmentation in Continuous Photo-streams. In *Proceedings of the 26th ACM international conference on Multimedia (MM '18)*.
- 📄 **Ana Garcia del Molino** and Michael Gygli. 2018. PHD-GIFs: Personalized Highlight Detection for Automatic GIF Creation. In *Proceedings of the 26th ACM international conference on Multimedia (MM '18)*.
- 📄 **Ana Garcia del Molino**, Xavier Boix, Joo-Hwee Lim, and Ah-Hwee Tan. 2017. Active Video Summarization: Customized Summaries via On-line Interaction with the User. In *AAAI Conference on Artificial Intelligence*.
- 📄 **Ana Garcia del Molino**, Cheston Tan, Joo-Hwee Lim, and Ah-Hwee Tan. 2017. Summarization of Egocentric Videos: A Comprehensive Survey. In *IEEE Transactions on Human-Machine Systems*, 47(1).

Other Publications

- 📄 **Ana Garcia del Molino**, Bappaditya Mandal, Jie Lin, Joo Hwee Lim, Vigneshwaran Subbaraju, Vijay Chandrasekhar. 2017. VC-I2R@ImageCLEF2017: Ensemble of Deep Learned Features for Lifelog Video Summarization. In *CLEF working notes*.
- 📄 Qianli Xu, Vigneshwaran Subbaraju, **Ana Garcia del Molino**, Jie Lin, Fen Fang, Joo-Hwee Lim, Liyuan Li, Vijay Chandrasekhar. 2017. Visualizing Personal Lifelog Data for Deeper Insights at the *NTCIR-13 Lifelog-2 Task*.
- 📄 Jie Lin, **Ana Garcia del Molino**, Qianli Xu, Fen Fang, Vigneshwaran Subbaraju, Joo-Hwee Lim, Liyuan Li, Vijay Chandrasekhar. 2017. VCI2R at the *NTCIR-13 Lifelog-2 Lifelog Semantic Access Task*.
- 📄 **Ana Garcia del Molino**, Qianli Xu, Joo-Hwee Lim. 2016. Describing lifelogs with convolutional neural networks: A comparative study. In *Proceedings of the first Workshop on Lifelogging Tools and Applications*.
- 📄 **Ana Garcia del Molino**. 2016. First Person View Video Summarization Subject to the User Needs. In *Proceedings of the 24th ACM international conference on Multimedia (MM'16)*.
- 📄 **Ana Garcia del Molino**, Bappaditya Mandal, Liyuan Li, Lim Joo Hwee. 2015. Organizing and retrieving episodic memories from first person view. In *IEEE International Conference on Multimedia & Expo Workshops (ICMEW)*.

(Check all my publications in my [Scholar](#) profile)