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.

- ⊕ garciadelmolino.github.io
- ⌨ GarciaDelMolino
- ✉ a.g.delmolino@gmail.com
- ☎ (+65) 8602 1449
- ⊚ (+34) 675288835

Professional Experience

BIGO

- ⊙ 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

gifs.com

- ⊙ 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

A*STAR

- ⊙ 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

- ⊙ National Inst. of Informatics, Tokyo
- ☷ 2013
- ⓘ Research Intern

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

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

MATLAB · C++ · OpenCV

Education and Skills

NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

PhD. in Cognitive Systems and Visual Computing

- ⊙ School of Computer Science and Engineering
- ☷ 2015-2019

UPC

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)