# 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          🕐 Ph.D. Candidate
📅 2014-March 2019                 👤 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.

Obect 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)