

Gerard Sanroma

Bonn (Germany)

🌐 gsanroma.github.io

Summary

- Strong track record in machine learning and computer vision with more than 30 papers in top-tier journals and conferences
- Adaptability and problem solving by having worked in 5 different countries across a breadth of topics including life sciences and defence
- Leadership and organization by management of a small team, PhD students supervision and organization of international workshops

Professional Experience

- **German Center for Neurodegenerative Diseases** **Bonn (Germany)**
Senior Researcher *2017–Present*
 - Organize the MRI group and oversee all the steps in the MRI data flow in the Rhineland Study
 - Inter-disciplinary collaboration with imaging physicists, epidemiologists, IT-experts and image analysis experts
 - Develop advanced tools for analyzing multi-modal brain MRI
- **Universitat Pompeu Fabra** **Barcelona (Spain)**
Marie Curie Fellow *2015–2017*
 - Supervise 2 PhD projects on machine learning for the analysis of fetal brain MRI and the study of neurodegenerative diseases
 - Clinical collaborations with the [Fetal Medicine Research Center](#) and the [Pasqual Maragall Foundation](#)
- **University of North Carolina** **Chapel Hill (United States)**
Researcher *2013–2015*
 - Machine learning for the automatic segmentation of brain MRI
- **Netherlands Organisation for Applied Scientific Research** **The Hague (Netherlands)**
Researcher *2012–2013*
 - Machine learning for the automatic detection of threats from video as part of a large international collaboration project

Education

- **Ph.D Computer Science** **Tarragona (Spain)**
Universitat Rovira i Virgili *2008–2012*
 - Graph matching using position coordinates and local features for image analysis
- **M.Sc Computer Science** **Tarragona (Spain)**
Universitat Rovira i Virgili *2006–2008*

Selected Publications

- [SCCA-ref: Novel sparse canonical correlation analysis with reference to discover independent spatial associations between white matter hyperintensities and atrophy](#), in MLMI MICCAI Workshop, 2018
- [Learning Non-Linear Patch Embeddings with Neural Networks for Label Fusion](#), in Medical Image Analysis, 2017
- [MSClique: discovering multiple structures in image pairs with the maximum weighted clique problem](#), in PLoS ONE, 2016
- [A Transversal approach for patch-based label fusion via matrix completion](#), in Medical Image Analysis, 2015
- [A unified approach to the recognition of complex actions from sequences of zone-crossings](#), in Image and Vision Computing, 2014

([complete list](#))

Certificates, Awards & Mentions

- **Juan de la Cierva Fellowship (Declined)**
Spanish Ministry of Economy and Finance 2017
- **GPU Titan Pascal X**
Nvidia 2016
Support a research project on deep learning for brain MRI segmentation
- **Research Certificate**
Catalan University Quality Assurance Agency 2016
- **Marie Curie Individual Fellowship**
European Commission 2015
- **Editor's Choice article**
Image and Vision Computing Journal 2014
G. Sanroma, *et al.*: A unified approach to the recognition of complex actions from sequences of zone-crossings. Image and Vision Computing, 2014; 32(5):363-378

Service and Leadership

- **Workshop Organizer:** Patch-based Techniques in Medical Imaging [2017](#) and [2018](#)
- **Guest Editor:** [Special Issue on Patch-based Techniques in Medical Imaging](#), in the Computerized Medical and Imaging Graphics Journal

Languages

- **Spanish, Catalan:** Native
- **English:** Proficient
- **German, French:** Threshold