Pedro Morgado

Curriculum Vitae

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▬▬▬ Appointments

Fall'22 - Now	**Assistant Professor @ University of Wisconsin-Madison** Dept. of Electrical and Computer Engineering
Fall'22 - Now	**Affiliate Assistant Professor @ University of Wisconsin-Madison** Dept. of Computer Sciences
2021–2022	**Postdoctoral Fellow @ Carnegie Mellon University, Robotics Institute** Mentor: Abhinav Gupta.
2015–2021	**Research Assistant @ University of California San Diego (UCSD)** Mentor: Nuno Vasconcelos
Summer 2019	**Research Intern @ Facebook AI Research, New York** Mentor: Ishan Misra
Summer 2017	**Research Intern @ Adobe Research, Seattle** Mentor: Oliver Wang
2012–2014	**Research Assistant @ Institute for Systems and Robotics, Lisbon** Mentors: Margarida Silveira & Jorge S Marques

▬▬▬ Education

2015–2021	**PhD, Electrical and Computer Eng., University of California San Diego.** Advisor: Prof. Nuno Vasconcelos. Thesis: *"Learning to see and hear without human supervision."* (link)
2011–2012	**MSc, Electrical and Computer Eng., Instituto Superior Técnico, Lisbon, Portugal.** Advisors: Prof. Margarida Silveira & Prof. Jorge S. Marques Thesis: *"Automated Diagnosis of Alzheimer's Disease using PET Images."* (link)
2008–2011	**BSc, Electrical and Computer Eng., Instituto Superior Técnico, Lisbon, Portugal**

▬▬▬ Teaching experience

Fall 2022	UWisc-Madison ECE 532 - Matrix Methods in Machine Learning. Instructor.
Spring 2019	UCSD ECE 271C - Statistical Learning III. Teaching Assistant.
Winter 2019	UCSD ECE 271B - Statistical Learning II. Teaching Assistant.
Spring 2016	UCSD ECE 161C - Digital Signal Processing II. Teaching Assistant.

▬▬▬ Honors and awards

2021	**Best paper award candidate**, IEEE Conf. on Computer Vision and Pattern Recognition (CVPR'21). Awarded to 32 out of 5900 submissions (top 0.5%).

2017-Now	**Reviewer recognition**. Outstanding reviewer at NeurIPS'21, CVPR'21, ICCV'17. Top 10% reviewer at NeurIPS'20. Top reviewer at NeurIPS'19.
2015	**FCT Graduate Fellowship (SFRH/BD/109135/2015)**. Four year fellowship for full-time doctoral studies awarded by the Portuguese Ministry of Sciences, Technology and Education.
2014	**UCSD Graduate Fellowship**, Electrical and Computer Eng. departmental fellowship for the academic year of 2014-2015.
2013	**Research Grant**, Portuguese Ministry of Sciences, Technology and Education.
2012	**Scientific Initiation Grant**, Portuguese Ministry of Sciences, Technology and Education.

▬▬▬ Service and leadership

Area Chair	IEEE / CVF Computer Vision and Pattern Recognition (CVPR), 2022.
Reviewing	IEEE / CVF Computer Vision and Pattern Recognition (CVPR)
	International Conference on Computer Vision (ICCV)
	Neural Information Processing Systems (NeurIPS)
	International Conference on Learning Representations (ICLR)
	IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)
	Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
	Journal of Machine Learning Research (JMLR)
	Transactions on Machine Learning Research (TMLR)
	Transactions on Big Data
Mentoring	Summer Research Internship Program. 2018 & 2019. Mentoring UCSD undergraduate and graduate students in computer vision research.
	ENLACE bi-national summer research program. 2018. Mentoring students in a high-school outreach program promoting diversity in research, especially in Hispanic communities.

▬▬▬ Invited talks

Oct 2022	Multi-modal representation learning from and for realistic audio-visual data. @ECCV'22 AV4D Workshop.
Sept 2022	Learning to see in the wild. Should SSL be truly unsupervised? @SILO @CVRT.
Jun 2022	Learning to see what and where it sounds. @CVPR'22 Sight and Sound Workshop.
Feb-Mar 2020	Learning to see and hear without human supervision. @TTI-Chicago @Virginia Tech @University of Pittsburgh @University of California, Merced @University of Wisconsin, Madison @University of Utah @University of Illinois, Chicago.

Jan 2020   Learning to see and hear from audio-visual co-occurrences.
@Pixel Cafe Seminar, UCSD.

Jun 2018   Self-supervised spatial audio generation
@Center for Visual Computing Retreat, UCSD

Peer-reviewed publications

* Denotes equal contribution

2022   [20] Learning State-Aware Visual Representations from Audible Inter-   *paper*
NeurIPS   actions. H Mittal, **P Morgado**, U Jain, A Gupta. Neural Information
Processing Systems (NeurIPS), 2022.

[19] A Closer Look at Weakly-Supervised Audio-Visual Source Local-   *paper*
ization. S Mo, **P Morgado**. Neural Information Processing Systems
(NeurIPS), 2022.

2022   [18] The Challenges of Continuous Self-Supervised Learning. S Purush-   *paper*
ECCV   walkam*, **P Morgado***, A Gupta. European Conference on Computer
Vision (ECCV), 2022. **(Oral presentation)**

[17] Localizing Visual Sounds the Easy Way. S Mo, **P Morgado**.   *paper*
European Conference on Computer Vision (ECCV), 2022.

2022   [16] Benchmarking and Automating the Image Recognition Capability   *paper*
Journal   of an In situ Plankton Imaging System. J Jaffe, K Le, Z Yuan, A Syed,
D Ratelle, E Orenstein, M Carter, S Strang, K Kenitz, **P Morgado**, P
Franks, N Vasconcelos. Frontiers in Marine Science, 2022.

2021   [15] Robust Audio-Visual Instance Discrimination. **P Morgado**, I   *paper*
CVPR   Misra, N Vasconcelos. Conference on Computer Vision and Pattern
Recognition (CVPR), 2021. **(Oral presentation)**

[14] Audio-Visual Instance Discrimination with Cross-Modal Agree-   *paper*
ment. **P Morgado**, N Vasconcelos, I Misra. Conference on Computer
Vision and Pattern Recognition (CVPR), 2021. **Best paper award
candidate**.

2020   [13] Learning Representations from Audio-Visual Spatial Alignment.   *paper*
NeurIPS   **P Morgado***, Y Li*, N Vasconcelos. Neural Information Processing
Systems (NeurIPS), 2020.

2020   [12] Deep Hashing with Hash-Consistent Large Margin Proxy Embed-   *paper*
IJCV   dings. **P Morgado**, Y Li, JC Pereira, M Saberian, N Vasconcelos.
International Journal on Computer Vision (IJCV), 2020.

2020 ECCV	[11] Solving Long-tailed Recognition with Deep Realistic Taxonomic *paper* Classifier. TY Wu, **P Morgado**, P Wang, CH Ho, N Vasconcelos. European Conference on Computer Vision (ECCV), 2020.
2019 CVPR	[10] NetTailor: Tuning the architecture, not just the weights. **P** *paper* **Morgado** and N Vasconcelos. Conference on Computer Vision and Pattern Recognition (CVPR), Long Beach, 2019.
	[9] PIEs: Pose Invariant Embeddings. Chih-Hui Ho, **P Morgado** and N *paper* Vasconcelos. Conference on Computer Vision and Pattern Recognition (CVPR), Long Beach, 2019.
2018 NeurIPS	[8] Self-Supervised Generation of Spatial Audio for 360 Video. **P** *paper* **Morgado**, N Vasconcelos, T Langlois, O Wang. Neural Information Processing Systems (NeurIPS), Montreal, 2018.
2017 CVPR	[7] Semantically Consistent Regularization for Zero-Shot Recognition. *paper* **P Morgado**, and N Vasconcelos. Conference on Computer Vision and Pattern Recognition (CVPR), 2017.
2015 Neurocomp.	[6] Minimal neighborhood redundancy maximal relevance: Application *paper* to the diagnosis of Alzheimer's disease. **P Morgado**, and M Silveira. Neurocomputing, 2015.
2015 CBM	[5] Predicting conversion from MCI to AD with FDG-PET brain images *paper* at different prodromal stages. C Cabral, **P Morgado**, DC Costa, and M Silveira. Computers in Biology and Medicine, 2015.
2013 ISBI	[4] Efficient selection of non-redundant features for the diagnosis of *paper* Alzheimer's disease. **P Morgado**, M Silveira, and JS Marques. In- ternational Symposium on Biomedical Imaging (ISBI) 2013. ***(Oral presentation)***
	[3] Extending Local Binary Patterns to 3D for the diagnosis of *paper* Alzheimer's disease. **P Morgado**, M Silveira, and JS Marques. Inter- national Symposium on Biomedical Imaging (ISBI) 2013.
2013 MLSP	[2] Texton-based diagnosis of Alzheimer's disease. **P Morgado**, M *paper* Silveira, and DC Costa. International Workshop on Machine Learning for Signal Processing (MLSP) 2013.
2013 CMBB	[1] Diagnosis of Alzheimer's disease using 3D Local Binary Patterns. *paper* **P Morgado**, M Silveira, and JS Marques. Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization, 2013.