

Angela Castillo

Webpage — Email — Google Scholar — LinkedIn

PROFESSIONAL SUMMARY

I am a Ph.D. candidate and a researcher at the Center for Research and Formation in Artificial Intelligence under the supervision of Prof. Pablo Arbeláez at Universidad de Los Andes in Bogotá, Colombia. My dedication lies in advancing the field of Generative Artificial Intelligence (Generative AI), focusing on a diverse array of Computer Vision applications within this domain. My research focuses mainly on tackling challenges in image super-resolution, human motion analysis, and enhancing efficiency in text-to-image generation. I am currently working on the intersection between Vision Generation and Large Language Models.

EDUCATION

Ph.D. in Engineering <i>Universidad de los Andes, Colombia</i> Thesis: Generative Artificial Intelligence	Jan 2020 - Present
M.Sc. in Biomedical Engineering <i>Universidad de los Andes, Colombia</i> Thesis: Stochastic Video Translation	Aug 2018 - Dec 2019
B.Sc. in Biomedical Engineering <i>Universidad de los Andes, Colombia</i> Concentration: Analysis of Biomedical Images and BioSignal Processing	Aug 2014 - May 2018

PUBLICATIONS

Adaptive Guidance <i>Universidad de los Andes, Colombia</i> Adaptive Guidance: Training-free Acceleration of Conditional Diffusion Models. Castillo A.* , Kohler J.*, Pérez J.C.*, Pérez J.P., Pumarola A., Ghanem B., Arbeláez P., Thabet A. (2023) In arXiv.	Dec 2023
EgoExo4D <i>Universidad de los Andes, Colombia</i> Understanding Skilled Human Activity from First- and Third-Person Perspectives. Kristen Grauman <i>et al.</i> (2024) CVPR 2024.	Nov 2023
BoDiffusion <i>Universidad de los Andes, Colombia</i> BoDiffusion: Diffusing Sparse Observations for Full-Body Human Motion Synthesis. Castillo A.* , Escobar M.*, Jeanneret G., Pumarola A., Arbeláez P., Thabet A., Sanakoyeu A. (2023) In Conference Proceedings of the IEEE/CVF International Conference on Computer Vision, Workshops.	Oct 2023
SEPAL <i>Universidad de los Andes, Colombia</i> SEPAL: Spatial Gene Expression Prediction from Local Graphs. Mejia G., Cárdenas P., Ruiz D., Castillo A. , Arbeláez P. (2023) In Conference Proceedings of the IEEE/CVF International Conference on Computer Vision, Workshops.	Oct 2023
Guarding the Guardians <i>Universidad de los Andes, Colombia</i> Guarding the Guardians: Automated Analysis of Online Child Sexual Abuse. Puentes J., Castillo A. , Osejo W., Calderón Y., Quintero V., Saldarriaga L., Agudelo D., Arbeláez P. (2023) In Conference Proceedings of the IEEE/CVF International Conference on Computer Vision, Workshops.	Oct 2023
Challenge report <i>ETH Zürich</i> NTIRE 2022 Image Inpainting Challenge: Report. Romero A., Castillo A. , Abril-Nova J., Timofte R. (2022) NTIRE 2022 Image Inpainting Challenge: Report. In: Conference Proceedings of the IEEE/CVF Computer Vision and Pattern Recognition, Workshops.	June 2022
Robust Super-Resolution <i>ETH Zürich</i>	Sept 2021

Generalized Real-World Super-Resolution through Adversarial Robustness.

Castillo A.* , Escobar M.* , Pérez J.C., Romero A., Timofte R., Van Gool L., Arbeláez P. (2021) In Conference Proceedings of the IEEE/CVF International Conference on Computer Vision, Workshops.

UltraGAN *Universidad de los Andes, Colombia*

Oct 2020

UltraGAN: Ultrasound Enhancement through Adversarial Generation.

Escobar M.* , Castillo A.* , Romero A., Arbeláez P. (2020) In SASHIMI 2020. Lecture Notes in Computer Science.

LUCAS *Universidad de los Andes, Colombia*

Oct 2020

LUCAS: LUnG CAncer Screening with Multimodal Biomarkers.

Daza L., Castillo A., Escobar M., Valencia S., Pinzón B., Arbeláez P. (2020) In ML-CDS 2020. Lecture Notes in Computer Science.

Smart Pooling *Universidad de los Andes, Colombia*

Jul 2020

Smart Pooling: AI Powered COVID-19 Testing.

M. Escobar, G. Jeanneret, L. Bravo-Sánchez , A. Castillo, C. Gómez, D. Valderrama, M. F. Roa, J. Martínez, J. Madrid-Wolff , M. Cepeda, M. Guevara-Suarez , O. L. Sarmiento , A. L. Medaglia , M. Forero-Shelton , M. Velasco, J. M. Pedraza-Leal, S. Restrepo, And P. Arbeláez. Scientific reports, 2020

* Denotes equal contributions

WORK EXPERIENCE

Graduate Research Assistant *Universidad de los Andes, Colombia*

Aug 2018 - Present

Algorithm development, empiric validation, and scientific research paper writing, under the supervision of Prof. Pablo Arbeláez.

Graduate Teaching Assistant *Universidad de los Andes, Colombia*

Jan 2019 - May 2023

Laboratory assistant of the graduate courses including Computer Vision and Analysis of Biomedical Imaging, under the supervision of Prof. Pablo Arbeláez.

Ph.D. Research Intern *ETH Zürich*

Sept 2021 - May 2022

Algorithm development, empiric validation, and scientific research paper writing, under the supervision of Prof. Luc Van Gool.

Undergraduate Teaching Assistant *Universidad de los Andes, Colombia*

Jan - May 2018

Laboratory teacher of the undergraduate course: Mathematical Principles in Medicine, under the supervision of Prof. José Ricardo Arteaga.

COMMUNITY SERVICE

Reviewer

I have served as a reviewer at CVPR, ECCV, ICCV, MICCAI, and TPAMI

Officer

Social Officer at the MICCAI Student Board.

AWARDS

CVPR 2022 Outstanding reviewer

May 2022

Swiss Government Excellence Scholarship *ETH Zürich*

2021 - 2022

I was selected for a Swiss Government Excellence Scholarship to work under the supervision of Prof. Luc Van Gool, Dr. Radu Timofte and Dr. Andrés Felipe Romero Vergara at the Computer Vision Lab.

SKILLS

Languages

Spanish (native), English (intermediate)

Software

PYTHON, PYTORCH, GITHUB, LINUX, L^AT_EX, INVENTOR