Margarita Geleta

geleta@berkeley.edu • +1 (949) 992-7053

Education

University of California, Berkeley — **Berkeley, CA**
Ph.D. in Computer Science — Current – Fall 2026
M.S. in Computer Science — August 2022 – December 2024
Major in Artificial Intelligence; Minor in Human-Computer Interaction.

University of California, Irvine — **Irvine, CA**
Ph.D. in Computer Science (transferred) — September 2021 – June 2022

Polytechnic University of Catalonia — **Barcelona, Spain**
B.S. in Data Science and Engineering — September 2017 – June 2021

Experience

Microsoft Research, *Audio and Acoustics Research Group* — **Redmond, WA**
(Upcoming) Research Intern — May 2025 – August 2025

Dolby Laboratories, Inc., *Advanced Technology Group* (ATG) — **San Francisco, CA**
Sound Tech R&D PhD Intern — May 2024 – August 2024

- Developed an extended reality (XR) application for spatial audio manipulation and deployed on Apple Vision Pro.
- Quantified the benefits of free-hand spatial audio manipulation in XR running an HCI user study with +25 users.
- Reported by some as "a whole new experience" and that the level of immersion was something they "never felt in Dolby Atmos". Converged into a foundational work for sound design in AR [4].

Amazon.com, *Home Innovation Team* (HIT) — **Seattle, WA**
Applied Scientist II Intern — May 2023 – August 2023

- Investigated image-to-image translation methods for novel view synthesis.
- Curated a new dataset of 430 culturally-diverse images for benchmarking GAN inversion and image editing methods.

Amazon.com, *Home Innovation Team* (HIT) — **Seattle, WA**
Applied Scientist II Intern — June 2022 – August 2022

- Worked with large-scale generative models, GAN inversion, and image editing with GANs.
- Contributed to the development of the state-of-the-art model for GAN inversion ("clone" algorithm) [2].

Stanford University, *School of Medicine* (Stanford DBDS) — **Palo Alto, CA**
Research Assistant — June 2021 – Current

- Introduced algorithms designed to analyze the genomes of diverse populations, and designed several generative models for artificial genotypes with the aim to augment populations underrepresented in genetic research and reinforce fairness [3].

Skills

Technical: (programming) Python, C++, C#, C, R; (scripting) Javascript, Bash; (markup) HTML5, CSS3; (frameworks) Unity3D, PyTorch, Flutter; (databases) PostgreSQL, SQLite, Neo4j.
Language: English (proficient), Spanish (native), Catalan (native), Russian (native).

Selected Publications

[1] **M. Geleta***, Cristina Puntí, Kevin McGuinness, Jordi Pons, Cristian Canton, and Xavier Giró i Nieto. PixInWav: *Residual Steganography for Hiding Pixels in Audio*. International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2022.
[2] Qianli Feng*, Raghudeep Gadde, Viraj Shah, **M. Geleta**, Pietro Perona, and Aleix M. Martinez. *Near Perfect GAN Inversion*. Under Legal review (Further information under request), 2023.
[3] **M. Geleta***, Daniel Mas Montserrat, Carlos D. Bustamante, Xavier Giró i Nieto, and Alexander G. Ioannidis. *Autoencoders for Genetic Variation*. (Submitted. Awaiting decision), 2025.
[4] Brandon Woodard*, **M. Geleta***, Joseph J. LaViola Jr., Andrea Fanelli, and Rhonda Wilson. *AudioMiXR: Spatial Audio Manipulation with 6DoF for Sound Design in Augmented Reality*. (Submitted. Awaiting decision), 2025.