Margarita Geleta

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

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY
Ph.D. in Computer Science
May 2027 | Berkeley, CA

UNIVERSITY OF CALIFORNIA, IRVINE
Ph.D. in Computer Science (Transferred)
Aug 2022 | Irvine, CA

POLYTECHNIC UNIVERSITY OF CATALONIA
B.Sc. in Data Science and Engineering
Jun 2021 | Barcelona, Spain

LINKS

Github:// **margaritageleta**
LinkedIn:// **margarita-geleta**
Website:// **margaritageleta.github.io**
GScholar:// **Margarita Geleta**

COURSEWORK

Artificial Intelligence • Scientific Computing • Machine Learning • Deep Learning • Data Analysis • Mathematical Optimization • Parallelism and Discrete Systems • Database Systems • Information Visualization • Algorithmics • Statistics

SKILLS

Programming: C++ • Python • R • Dart
Scripting: Javascript • Bash
Markup: HTML5 • CSS3
Frameworks: Django • Flutter • PyTorch
Databases: PostgreSQL • SQLite

LANGUAGES

English **Proficient**
Spanish **Native**
Catalan **Native**
Russian **Native**

RESEARCH & EXPERIENCE

AMAZON.COM | Applied Scientist
Jun 2022 – Aug 2022 / May 2023 - Aug 2023 | Seattle, WA
- Worked with large-scale generative models, image-to-image translation.

STANFORD UNIVERSITY | Research Assistant
Jun 2021 – Sept 2021 | Stanford, CA
- Explored novel Deep Learning techniques for genomic data with applications in dimensionality reduction, compression, classification and data simulation.
- Explored *Variational* and Discrete-Space (*Multi-Bernoulli* and *Vector-Quantized*) Autoencoders for the purpose of *Single Nucleotide Polymorphisms* (SNP) data compression and developed a complete pipeline for SNP datasets compression.

IMAGE PROCESSING GROUP (GPI) | Researcher
Sept 2020 – Mar 2021 | Barcelona, Spain
- Led pioneering research in multimodal deep steganography for hiding images within audio (within earshot hearing range).

JEDI JUNIOR ENTERPRISE | Machine Learning instructor, Front-end developer, ExBo member
Sept 2019 – Sept 2021 | Barcelona, Spain
- Directed the organization of JEDI Academy courses and organized bimonthly workshops on Tech topics with +20 attendees at the *Barcelona School of Informatics* (FIB). Ran introductory R language workshop.
- Adapted the course for online teaching due to the coronavirus pandemic and tutored students through online platforms.
- Adapted materials for a blind student and guided them throughout the course.

FIB VISIONA | President & Main Organizer
Oct 2018 – Jul 2021 | Barcelona, Spain
- Co-founded FIB Visiona association, in charge of connecting students of the Polytechnic University of Catalonia with cutting-edge Tech companies.
- Organized 3 editions of the career fair with +200 attendees in each, raising €135,000 in sponsorships and donating €22,760 in phylantrophy.

AWARDS

2023   Samuel Silver Memorial Scholarship, UC Berkeley.
2022   Fellowship for CS Ph.D. program by EECS Dept., UC Berkeley.
2021   CS Department Dean's Fellowship (outstanding research potential).
2021   Fellowship for CS Ph.D. program by the Department of CS, UC Irvine.
2020   Nominated for the *Dona TIC Award* (2nd place), STEM role model.

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. ICASSP accepted, 2021.

[2] **M. Geleta**, Daniel Mas Montserrat, Carlos D. Bustamante, Xavier Giró i Nieto, and Alexander G. Ioannidis. Deep variational autoencoders for population genetics. Submitted, 2021.

[3] Maria Perera, Daniel Mas Montserrat, Míriam Barrabes, **M. Geleta**, Xavier Giró i Nieto, and Alexander G. Ioannidis. Generative moment matching networks for genotype simulation. EMBC accepted, 2022.