

# Margarita Geleta

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## 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  
Current GPA: 4.0 / 4.0

**POLYTECHNIC UNIVERSITY OF CATALONIA**  
B.SC. IN DATA SCIENCE AND ENGINEERING  
Jun 2021 | Barcelona, Spain  
GPA: 7.81 / 10.0

**IMMACULADA CONCEPCIÓ HIGH SCHOOL**  
BEST STUDENT OF MY PROMOTION  
Jun 2017 | Spain  
GPA: 9.55 / 10.0  
Finished with Honors

## 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 | Seattle, WA  
• Worked with GANs, GAN inversion and deep harmonization.

**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 philanthropy.

## AWARDS

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.  
2017 Finished High School with Honors.

## 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.