Noel Arteche

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Summary

Born in 1998 in San Sebastián, Spain, where I studied **Computer Science and Mathematics** at the **University of the Basque Country**, with a year abroad at the **KU Leuven** in Belgium. I then graduated *cum laude* from the **Master of Logic** at the **University of Amsterdam**, while working as a researcher at the Logic and Reasoning (LoRea) group at the University of the Basque Country.

Research Interests

- computational complexity theory
- theoretical computer science
- logic
- philosophy of mathematics
- philosophy of mathematical practice

Education

University of Amsterdam Amsterdam, The Netherlands
MSc in Logic (120 ECTS) 2020 – 2022

- Two-year master's program at the Institute for Logic, Language and Computation (ILLC).
  Courses in logic, theoretical computer science, mathematics and philosophy.
- Graduated *cum laude*.
- Thesis: *Parameterized Compilability*
  Supervisors: Ronald de Haan (ILLC, University of Amsterdam) and Hubie Chen (King's College London)

University of the Basque Country San Sebastián, Spain
BSc in Computer Science (240 ECTS) 2016 – 2020

- Graduated first of my year, GPA: 9.43 (out of 10)
- Erasmus+ exchange at the KU Leuven (Belgium), during the academic year 2019-20.
  Completed 60 ECTS on master's level courses and wrote my thesis.
- Thesis: *A Formal Language and Tool for QBF Family Definitions*
  Supervisors: Marc Denecker (KU Leuven), Matthias van der Hallen (KU Leuven), Montserrat Hermo (University of the Basque Country).
  Results presented at the QBF Workshop of the SAT 2020 conference (see [2]).

Spanish National University of Distance Education (UNED) Spain
BSc in Mathematics (incomplete) 2017 – 2019

- Studied half of the mathematics bachelor's degree part-time, while studying Computer Science; never fully completed it.
- GPA: 8.6 (out of 10)

Summer Schools

University of Göttingen Göttingen, Germany
Hilbert-Bernays Summer School on Logic and Computation October 2020

Teaching

- **Teaching Assistant** at the University of Amsterdam Spring 2022
  Computational Complexity (6 ECTS · MSc course · 5314COCO6Y)
  Lecturers: Ronald de Haan and Jan Maly

Scholarships and Awards

- **Evert Willem Beth Scholarship** 2021 – 2022
  Granted the E. W. Beth scholarship for my master's in logic at the University of Amsterdam

- **Extraordinary BSc Degree Award** 2020
  Best Computer Science student at the University of the Basque Country

- **Kutxa Fundazioa Award** 2020
  Best Computer Science Student

Research Experience

University of the Basque Country San Sebastián, Spain
Logic & Reasoning Group (LoRea), Faculty of Computer Science

- Predoctoral researcher May 2021 – December 2021
  * Topic: The complexity of realizability for temporal logics
  * Supervisor: Montserrat Hermo
- Research internship June 2019 – August 2019
  * Topic: Empirical proof complexity of quantified Boolean formulas
  * Supervisor: Montserrat Hermo

Research Papers

[1] **N. Arteche** and M. Hermo, "Prime Implicant Enumeration via QBF Solvers", in *QBF Workshop at the 24th International Conference on Theory and Applications of Satisfiability Testing*, 2021.

[2] **N. Arteche** and M. van der Hallen, "A Formal Language for QBF Family Definitions", in *QBF Workshop at the 23rd International Conference on Theory and Applications of Satisfiability Testing*, 2020.

Languages

- **Spanish:** native speaker
- **Basque:** native speaker, C1 certificate (EGA)
- **English:** fluent, C2 level (Cambridge Certificate of Proficiency in English)
- **French:** fluent, C2 level (DALF C2)
- **Dutch:** beginner, A1 level (diploma from the Instituut voor Levende Talen at the KU Leuven)

Extracurricular Activities

- Co-organiser of the Φ-Math reading group at the University of Amsterdam 2020 – 2021
  Co-founded a reading group on the philosophy of mathematics at the Institute for Logic, Language and Computation.

- Cultural critique on video games 2016 – 2020
  I was an editor at the Spanish online video game magazine Start, where I wrote about video games regarding narrative, language, medium essentialism and artificial intelligence. I was also an editor ZehnGames and I was invited to write a piece for the third issue of the Spanish video games essay compilation Deus Ex Machina. A complete list of my (academic and non-academic) texts is available on my personal site.