

My main interests involve large-scale distributed systems, with a primary focus on efficient eventually consistent systems that provide strong guarantees. In the past I have worked under the supervision of Prof. Dr. Nuno Preguia on the design and implementation of non-uniform CRDTs for the AntidoteDB key-value store.

## EXPERIENCE

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- **NOVA LINCS, Laboratory for Computer Science and Informatics** Caparica, Portugal  
*Researcher* May 2017 - Present
- **Faculdade de Ci4ncias e Tecnologia, Universidade Nova de Lisboa** Caparica, Portugal  
*Undergraduate Research Opportunity Program* March 2013 - May 2013
  - Designed and implemented a prototype library for Python and OCaml interoperability.

## MASTER THESIS

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- **Non-uniform replication for replicated objects** March 2016 – April 2017  
*Advised by Nuno Preguia*
  - Designed and implemented a prototype of non-uniform CRDTs for the AntidoteDB key-value store.
  - **Grade:** 19 out of 20
  - **Keywords:** Non-uniform Replication; Partial Replication; Replicated Data Types; Eventual Consistency; Key-Value Stores.
  - **Relevant Repositories:**
    - \* [http://github.com/gmcabrita/antidote\\_ccrdt](http://github.com/gmcabrita/antidote_ccrdt)
    - \* <http://github.com/gmcabrita/antidote/tree/ccrdts>

## EDUCATION

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- **Faculdade de Ci4ncias e Tecnologia, Universidade Nova de Lisboa** Caparica, Portugal  
*Master of Science in Computer Science and Engineering (Integrated Master's Degree)* September 2010 – April 2017
  - **Electives:** Concurrency and Parallelism, Distributed Systems, Distributed Algorithms

## SELECTED PROJECTS

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- **Cuckoo:** Developed and maintained a Cuckoo Filter library written in the Elixir programming language.
- **Murmur:** Developed and maintained a Murmur3 library written in the Elixir programming language.
- **Bloomex:** Developed and maintained a Scalable Bloom Filter library written in the Elixir programming language.

## SKILLS

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- **Natural Languages:** Portuguese (mother tongue), English (fluent)
- **Programming Languages:** Elixir, Erlang, Go, Java, Python, SQL, C, JavaScript
- **Technologies:** Linux, Git, Docker, OTP, L<sup>A</sup>T<sub>E</sub>X