

Catarina Gralha

✉ acg.almeida@campus.fct.unl.pt

📄 [microlina.github.io](https://github.com/microlina)

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Academic Degrees

- 2019 **PhD Computer Science**, *Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa*, Portugal.
Software engineering, with a focus on requirements engineering and software quality, using empirical software engineering techniques.
- 2014 **MSc Computer Science and Engineering**, *Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa*, Portugal.
Specialisation in software engineering. MSc thesis graded 20/20.
- 2012 **BSc Computer Science and Engineering**, *Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa*, Portugal.
Final project graded 17/20.

Professional Activities

- Jan. 2021 – **Researcher**, *NOVA LINCS*, Universidade Nova de Lisboa, Portugal.
today I work in the Software Systems group, in the topics of software quality and usability, requirements engineering, software developers productivity, and gender bias in computer science.
- March 2020 – **Researcher**, *PRECISE Project*, Universidade Nova de Lisboa, Portugal.
Dec. 2020 I worked in the PRECISE project, a corecxy by design methodology for available cloud applications.
- Jan. 2014 – **Graduate Teaching Assistant**, *Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa*, Portugal.
Jan. 2020
Lab classes and office hours of the courses:
 - Software Development Methods (UML, OCL)
 - Introduction to Programming (Java)
 - Object-Oriented Programming (Java)
 - Object-Oriented Programming B (Java)
 - Web Development (Ruby on Rails)
 - Informatics for Science and Engineering (Octave)
 - Transversal Skills for Science and Technology
- Aug. 2018 – **Visiting Research Student**, *University of Bristol*, United Kingdom.
Sept. 2018 I worked with Dr. Awais Rashid and Dr. Ben Shreeve, in the Bristol Cyber Security group. We applied Grounded Theory to a set of game sessions about security requirements elicitation.
- Jan. 2017 – **Visiting Research Student**, *University of Victoria*, Canada.
June 2017 I worked with Dr. Daniela Damian, in the SEGAL Research Group. We performed observations, interviews, meetings, and offered counselling to software startups, with regard to their practices in Requirements Engineering.

Grants, Honors, and Awards

- 2015 FCT-MCTES (Portuguese Foundation for Science and Technology) Research Grant for PhD students (4-years long)

- 2014 Best paper award in the 26th International Conference on Advanced Information Systems Engineering (CAiSE'14)

Publications

Journal Articles

- 2020 **Catarina Gralha**, Miguel Goulão, João Araújo. Are There Gender Differences When Interacting With Social Goal Models? A Quasi-Experiment, *Empirical Software Engineering – An International Journal (to appear)*
- 2015 **Catarina Gralha**, Miguel Goulão, João Araújo. Metrics for Measuring Complexity and Completeness for Social Goal Models, *Information Systems Vol. 53*, <https://doi.org/10.1016/j.is.2015.03.006>

Conferences and Workshops

- 2019 **Catarina Gralha**, Miguel Goulão, João Araújo. Analysing Gender Differences in Building Social Goal Models: A Quasi-Experiment. *Proceeding of the 27th IEEE International Requirements Engineering Conference (RE 2019) (Candidate for Best Paper Award)*, <https://doi.org/10.1109/RE.2019.00027>
- 2018 Mafalda Santos, **Catarina Gralha**, Miguel Goulão, João Araújo. Increasing the Semantic Transparency of the KAOS Goal Model Concrete Syntax. *Proceeding of the 37th International Conference on Conceptual Modeling (ER 2018)*, https://doi.org/10.1007/978-3-030-00847-5_30
- Mafalda Santos, **Catarina Gralha**, Miguel Goulão, João Araújo, Ana Moreira. On the Impact of Semantic Transparency on Understanding and Reviewing Social Goal Models. *Proceeding of the 26th IEEE International Requirements Engineering Conference (RE 2018)*, <https://doi.org/10.1109/RE.2018.00031>
- Catarina Gralha**, Daniela Damian, Anthony I. Wasserman, Miguel Goulão, João Araújo. The Evolution of Requirements Practices in Software Startups. *Proceeding of the 40th International Conference on Software Engineering (ICSE 2018)*, <https://doi.org/10.1145/3180155.3180158>
- 2016 Lyrene Silva, Ana Moreira, João Araújo, **Catarina Gralha**, Miguel Goulão and Vasco Amaral. Exploring Views for Goal-oriented Requirements Comprehension. *Proceedings of the 35th International Conference on Conceptual Modeling (ER 2016)*, https://doi.org/10.1007/978-3-319-46397-1_12
- Mafalda Santos, **Catarina Gralha**, Miguel Goulão, João Araújo, Ana Moreira, João Cambeiro. What is the Impact of Bad Layout in the Understandability of Social Goal Models? *Proceedings of the 24th International Requirements Engineering Conference (RE 2016)*, <https://doi.org/10.1109/RE.2016.51>
- Catarina Gralha**. Evaluation of Requirements Models. *Doctoral Symposium @ 24th International Requirements Engineering Conference (DS@RE 2016)*, <https://doi.org/10.1109/RE.2016.28>
- Denise Bombonatti, **Catarina Gralha**, Ana Moreira, João Araújo, Miguel Goulão. Usability of Requirements Techniques: A Systematic Literature Review. *Proceedings of the 31st ACM Symposium on Applied Computing - Requirements Engineering Track (SAC 2016)*, <https://doi.org/10.1145/2851613.2851758>

- 2014 **Catarina Gralha**, Miguel Goulão, João Araújo. Identifying Modularity Improvement Opportunities in Goal-oriented Requirements Models. *Proceedings of the 26th International Conference on Advanced Information Systems Engineering (CAiSE 2014) (Best Paper Award)*, https://doi.org/10.1007/978-3-319-07881-6_7
- 2013 **Catarina Gralha**, Miguel Goulão, João Araújo. A Systematic Comparison of *i** Modelling Tools Based on Syntactic and Well-formedness Rules. *Proceedings of the 6th International *i** Workshop 2013 (*i** workshop @ CAiSE 2013)*,

Activities

PC Member

- 2021 International Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ 2021)
- 2020 International Requirements Engineering Conference (RE 2020) – Posters and Tool Demos
International Requirements Engineering Conference (RE 2020) – Artifacts Track
Conferencia Iberoamericana de Software Engineering (CIbSE 2020) – RE Track
International Conference on Information Systems Development (ISD 2020)
International Workshop on Model-Driven Requirements Engineering (MoDRE 2020)
Workshop on Requirements Engineering (WER 2020)

Reviewer

- 2021 Software and Systems Modeling (SoSyM)
- 2020 Journal of Object Technology (JOT)
Software and Systems Modeling (SoSyM)
The Innovation
- 2018 Information and Software Technology Journal (INFSOJ)
Transactions on Software Engineering (TSE)

External Reviewer

- 2021 International Conference on Software Engineering (ICSE 2021)
- 2020 Workshop on Requirements Engineering (WER 2020)
International Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ 2020)
International Conference on Advanced Information Systems Engineering (CAiSE 2020)
International Conference on Research Challenges in Information Science (RCIS 2020)
- 2019 International Requirements Engineering Conference (RE 2019)
- 2018 International Requirements Engineering Conference (RE 2018)
International Conference on Advanced Information Systems Engineering (CAiSE 2018)
ACM/SIGAPP Symposium on Applied Computing (SAC 2018)
International Conference on Information Systems Development (ISD 2018)
IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2018)
International Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ 2018)
- 2016 Journal of Information and Software Technology (2016)
IEEE International Requirements Engineering Conference (RE 2016)

- 2015 Brazilian Symposium on Software Engineering (SBES 2015)
Proceedings Co-Chair
- 2021 IEEE International Requirements Engineering Conference (RE 2021)
International Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ 2021)
Web Chair
- 2017 IEEE International Requirements Engineering Conference (RE 2017)
- 2016 IEEE International Requirements Engineering Conference (RE 2016)
Student Volunteer
- 2017 International Requirements Engineering Conference (RE 2017)
- 2012 INForum Simpósio de Informática (INForum 2012)
Others
- 2018 Organisation of the 3rd Workshop of the Doctoral Program in Informatics of Universidade Nova de Lisboa

Graduation Activities

MSc students

- ongoing* Eduardo Reis. *Surveying communities of users of MATLAB and clones*. Co-supervision with Prof. Miguel Monteiro
- Catarina Matos. *Inclusion Promotion in Software Development*. Co-supervision with Prof. Miguel Goulão
- Diogo Patrício. *Eye-Tracking Analysis Framework*. Co-supervision with Prof. Miguel Goulão
- Raquel Ferreira. *On the Quality of Deriving Conceptual Models from Use Cases and User Stories*. Co-supervision with Prof. João Araujo
- João Gonçalo Oliveira. *Gender-inclusiveness in the software industry*. Co-supervision with Prof. Miguel Goulão
- Rúben Rebelo. *Promoting software developers' productivity in the context of a pandemic*. Co-supervision with Prof. Miguel Goulão
- Inês Ribeiro. *Mapping gender bias in software development*. Co-supervision with Prof. Miguel Goulão

During my PhD, I also (informally) co-supervised the following MSc students:

- 2020 Rita Pereira. *Quality Evaluation of User Stories*. Co-supervision with Prof. Miguel Goulão and Prof. João Araújo
- 2017 Mafalda Santos. *Cognitive Effectiveness Evaluation of Goal-Oriented Requirements Models*. Co-supervision with Prof. Miguel Goulão and Prof. João Araújo.

Projects

- 2020 – present **PRECISE**, *A correct by design methodology for available cloud applications*.

2017 – *present* **NaPiRE**, *Naming the Pain in Requirements Engineering*.

NaPiRE constitutes a globally distributed family of surveys on RE practices and problems. The main goal is to help the research community getting a better understanding of industrial trends in RE and problems faced therein.

Communication and Outreach

2019 – *present* Gulbenkian Knowledge Academies: oCTo – NOVA Computational Thinking Academy

2009 – *present* Expo FCT@DI, an annual open day of Faculdade de Ciências e Tecnologia, with demonstrations and activities for middle and high school students.

2013 – *present* Pong!@Escolas, presentation of a both collaborative and competitive version of the Pong! game to children and teenagers.

2018 and 2019 *Ciência Viva no Laboratório*, a scientific program in the University for children and teenagers, during the summer.

Languages

Portuguese **Native language**

English **Proficient user (C1)**

French **Proficient user (C1)**

Japanese **Basic user (A1)**

Language course at ILNOVA (2010)

Language courses at Alliance Française (2011-2015)

Language courses at ILNOVA (2017-2018)