# JOSÉ CAMPOS

## PERSONAL INFORMATION

Was born in Portugal, 29 January 1986

email jose.campos@sheffield.ac.uk

skype zecarlosdecampos

website jose.github.io

phone +351 964 616 542 — +44 07943 737915



#### WORK EXPERIENCE

Sept 2016-Jan

Teaching Assistant

The University of Supp

Supporting master students on advanced software testing activities. Reference: Dr. Gordon Fraser · gordon.fraser@sheffield.ac.uk

Sept 2015–Jan

Teaching Assistant

2016

The University of Sheffield

Sheffield

Supporting master students on advanced software testing activities.

Reference: Dr. Gordon Fraser · gordon.fraser@sheffield.ac.uk

Sept 2014–Jan

2015

Teaching Assistant

The University of Sheffield

Supporting master students on building complex software such as for use in aerospace

applications.

Reference: Dr. Kirill Bogdanov . k.bogdanov@sheffield.ac.uk

Jun 2012-

Nov 2013

Research Assistant

University of Porto Faculty of Engineering Investigate the use of various generic invariants in the value and time domain, their effect on Spectrum-based Fault Localization (SFL)'s diagnostic precision, their relation with existing test oracles, and their runtime overhead, in particular, the density required or strategic placement (trading off overhead vs precision).

Reference: Dr. Rui Abreu · rui@computer.org

Jul-Sept 2011 Summer Trainee

Critical Software

Certification of critical aerospace software.

Reference: Eng. Ricardo BARBOSA · rbarbosa@criticalsoftware.com

Jul-Sept 2010 Summer Trainee

Caixa Mágica Software Developed an internal project for Caixa Mágica operating system, with the main goal to

improve the driver of the wireless card Realtek 8192 of Magalhães 2 computer.

Reference: Dr. Paulo Trezentos · paulo.trezentos@caixamagica.pt

Feb-Jul 2010 Teaching Assistant

University of Porto Faculty of Engineering Helping and guiding the students at Computer Laboratory of Master in Informatics and

Computing Engineering.

Reference: Dr. Rui Abreu · rui@computer.org

EDUCATION

Dec 2013-... The University of Sheffield, United Kingdom

PhD Student in Computer Science Test Generation and Fault Localisation for Evolving Software.

Supervisors: Dr. Gordon Fraser · gordon.fraser@sheffield.ac.uk and

Dr. Rui Abreu · rui@computer.org

Set 2006–Fev

University of Porto, Portugal

2012

Informatics and Computing Engineering
Supervisor: Dr. Rui Abreu · rui@computer.org

Masters in Informatics and Computing Engineering

- José Campos, Yan Ge, Gordon Fraser, Marcelo Eler, and Andrea Arcuri.
   An Empirical Evaluation of Evolutionary Algorithms for Test Suite Generation
   Distinguished Paper Award.
  - In Tim Menzies and Justyna Petke, editors, *Proceedings of the 9th International Symposium Search-Based Software Engineering (SSBSE)*, pages 33–48. Springer International Publishing, Cham, 2017.
- [2] Spencer Pearson, José Campos, René Just, Gordon Fraser, Rui Abreu, Michael D. Ernst, Deric Pang, and Benjamin Keller.
  - Evaluating and improving fault localization.
  - In Proceedings of the 39th ACM/IEEE International Conference on Software Engineering, ICSE '17, pages 609–620, Piscataway, NJ, USA, 2017. IEEE Press.
- [3] Sina Shamshiri, José Campos, Gordon Fraser, and Phil McMinn.
  - Disposable Testing: Avoiding Maintenance of Generated Unit Tests by Throwing Them Away.
  - In Proceedings of the 39th ACM/IEEE International Conference on Software Engineering, ICSE '17, pages 207–209, 2017.
- [4] Gordon Fraser, José Miguel Rojas, José Campos, and Andrea Arcuri. EvoSuite at the SBST 2017 Tool Competition.
  - In Proceedings of the 10th International Workshop on Search-Based Software Testing, SBST '17, pages 39–42, 2017.
- [5] Andrea Arcuri, José Campos, and Gordon Fraser.
  - Unit Test Generation During Software Development: EvoSuite Plugins for Maven, IntelliJ and Jenkins.
  - In Proceedings of the 2016 IEEE Ninth International Conference on Software Testing, Verification and Validation, ICST '16, pages 401–408, Washington, DC, USA, 2016. IEEE Computer Society.
- [6] Ermira Daka, José Campos, Gordon Fraser, Jonathan Dorn, and Westley Weimer. Modeling Readability to Improve Unit Tests
  - ACM SIGSOFT Distinguished Paper Award.
  - In Proceedings of the 2015 10th Joint Meeting on Foundations of Software Engineering, ESEC/FSE 2015, pages 107–118, New York, NY, USA, 2015. ACM.
- [7] José Miguel Rojas, José Campos, Mattia Vivanti, Gordon Fraser, and Andrea Arcuri. Combining Multiple Coverage Criteria in Search-Based Unit Test Generation Best Paper with industry-relevant SBSE results.
  - In Márcio Barros and Yvan Labiche, editors, Proceedings of the 7th International Symposium Search-Based Software Engineering (SSBSE), volume 9275 of Lecture Notes in Computer Science, pages 93–108. Springer International Publishing, 2015.
- [8] José Campos, Gordon Fraser, Andrea Arcuri, and Rui Abreu. Continuous Test Generation on Guava.
  - In Márcio Barros and Yvan Labiche, editors, *Proceedings of the 7th International Symposium Search-Based Software Engineering (SSBSE)*, volume 9275 of *Lecture Notes in Computer Science*, pages 228–234. Springer International Publishing, 2015.
- [9] Ermira Daka, José Campos, Jonathan Dorn, Gordon Fraser, and Westley Weimer. Generating Readable Unit Tests for Guava.
  - In Márcio Barros and Yvan Labiche, editors, *Proceedings of the 7th International Symposium Search-Based Software Engineering (SSBSE)*, volume 9275 of *Lecture Notes in Computer Science*, pages 235–241. Springer International Publishing, 2015.
- [10] José Campos, Andrea Arcuri, Gordon Fraser, and Rui Abreu.
  - Continuous Test Generation: Enhancing Continuous Integration with Automated Test Generation.
  - In Proceedings of the 29th ACM/IEEE International Conference on Automated Software Engineering, ASE '14, pages 55–66, New York, NY, USA, 2014. ACM.
- [11] José Campos, Rui Abreu, Fraser Gordon, and Marcelo d'Amorim.
  - Entropy-based Test Generation for Improved Fault Localization.
  - In Proceedings of the 28th IEEE/ACM International Conference on Automated Software Engineering, ASE 2013, pages 257–267, New York, NY, USA, 2013. ACM.
- [12] Carlos Gouveia, José Campos, and Rui Abreu.
  - Using  $HTML_5$  Visualizations in Software Fault Localization.
  - In Proceedings of the 1st IEEE Working Conference on Software Visualization (co-located with International Conference on Software Maintenance, ICSM), VISSOFT 2013, pages 1–10, Washington, DC, USA, 2013. IEEE Computer Society.
- [13] Pedro Machado, José Campos, and Rui Abreu.
  - MZoltar: Automatic Debugging of Android Applications.
  - In Proceedings of the 1st International Workshop on Software Development Lifecycle for Mobile (co-located with European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE), DeMobile 2013, pages 9–16, New York, NY, USA, 2013. ACM.

[14] José Campos and Rui Abreu. Leveraging a Constraint Solver for Minimizing Test Suites. In Proceedings of the The Symposium on Engineering Test Harness (co-located with QSIC),

TSE-TH 2013, pages 253–259, Washington, DC, USA, 2013. IEEE.

[15] José Campos and Rui Abreu.

Encoding Test Requirements as Constraints for Test Suite Minimization. In Proceedings of the 10th International Conference on Information Technology: New Generations, ITNG 2013, pages 317–322, Washington, DC, USA, 2013. IEEE Computer Society.

[16] José Campos, André Riboira, Alexandre Perez, and Rui Abreu. GZoltar: An Eclipse Plug-in for Testing and Debugging. In Proceedings of the 27th IEEE/ACM International Conference on Automated Software Engineering, ASE 2012, pages 378–381, New York, NY, USA, 2012. ACM.

[17] André Riboira, Rui Rodrigues, Rui Abreu, and José Campos. Integrating Interactive Visualizations of Automatic Debugging Techniques on an Integrated Development Environment. IJCICG, 3(2):42–59, 2012.

### EVENTS

Sept 2015 Student Volunteer

Conference The 10th Joint Meeting of the European Software Engineering Conference and the ACM

SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE)

May 2015 Student Volunteer

Conference The 37th International Conference on Software Engineering (ICSE)

> Jun 2014 Organising Committee

Conference The 10th International Summer School on Training And Research On Testing (TAROT)

> Nov 2013 Student Volunteer

Conference The 28th IEEE/ACM International Conference on Automated Software Engineering (ASE)

> Session-Chair of Software Testing track Apr 2013

Conference The 10th International Conference on Information Technology: New Generations (ITNG)

CO-SUPERVISOR

Sept 2014–Jul A Multi-Objective Optimization Approach to Test Suite 2015

Reduction

Institution University of Porto · Faculty of Engineering

Degree Masters in Informatics and Computing Engineering

Student Jorge Costa

Supervisor Dr. Rui Abreu · rui@computer.org

> Sept 2013–Jul Defining a Test Automation System for Mobile Apps

2014

Institution University of Porto · Faculty of Engineering

Degree Masters in Informatics and Computing Engineering

Student Renato Rodrigues

Supervisor Dr. Rui Abreu · rui@computer.org

> Sept 2012-HTML5-based Visualizations to Support Software Fault

Jun 2013 Isolation

Institution University of Porto · Faculty of Engineering Degree Masters in Informatics and Computing Engineering

Student Carlos Gouveia

Dr. Rui Abreu · rui@computer.org Supervisor

> Sept 2012-

Generating Asserts for Test Cases Efficiently Jun 2013

Institution University of Porto · Faculty of Engineering Degree Masters in Informatics and Computing Engineering

Student Supervisor Luís Pinho

Dr. Rui Abreu · rui@computer.org

Sept 2012-

Jun 2013

InstitutionUniversity of Porto · Faculty of Engineering Degree Masters in Informatics and Computing Engineering

Student Pedro Machado

Supervisor Dr. Rui Abreu · rui@computer.org

## PERSONAL SKILLS AND COMPETENCES

Mother tongue(s) Portuguese

Self-assessment English

Social skills and

- Ability to work independently or as part of a team - Responsibility, confidence, conscience and sincerity

competences - Ability to take initiative when necessary - Determination and willingness to learn

Organizational skills and competences - Ability to organize time and tasks

- Sense of responsibility

Technical skills and competences - Ability to develop applications for Unix

- Development of projects of software engineering: specification, design and

implementation

- Creation of a documentation project on Software Engineering and user documentation

Automatic Debugging of Android Applications

- Experience on object oriented programming (OOP)

Driving licence(s)