March 2020 - Today

Personal Date of birth: May 15, 1986 Information

Nationality: Brazilian

Residence: Eindhoven, The Netherlands

Research Interests Social and technical aspects of software engineering, mining software repositories, empirical software engineering, software maintenance and evolution, error handling, energy consumption.

Academic Experience

Postdoctoral Researcher - Eindhoven University of Technology

Department of Mathematics and Computer Science

Software Engineering and Technology (SET) group Research topics: Software evolution (code reviews, technical debt, self-admitted technical debt,

code comprehension), mining software repositories.

Supervisor: Alexander Serebrenik

Postdoctoral Researcher - Federal University of Pernambuco

Informatics Center March 2019 - February 2020

National Institute of Science and Technology in Software Engineering

Research topics: Software evolution (code reviews, code comprehension), mining software

repositories.

Supervisor: Fernando Castor

Education

Federal University of Pernambuco, Brazil

Informatics Center

Ph.D. Computer Science

February 2019

- Thesis Topic: "Understanding Confusion in Code Reviews"
- Advisor: Fernando Castor
- Co-Advisor: Alexander Serebrenik
- Areas: human aspects of code reviews, confusion, machine learning, exploratory software engineering.

Federal University of Pernambuco, Brazil

Informatics Center

MSc Computer Science

August 2013

- Dissertation Topic: "An Exploratory Study on Exception Handling Bugs"
- Advisor: Fernando Castor
- Areas: Exception handling, bugs, software repository mining.

Federal University of Pernambuco, Brazil

Informatics Center

BSc Computer Science

September 2009

- Dissertation Topic: "Promodeller: Software Process Modeling Tool from BPMN files using Process Ontology"
- Advisor: Alexandre Marcos Lins de Vasconcelos
- Degree: 8.48/10
- Areas: Business Process Modeling Notation (BPMN), Software Process Engineering Metamodel (SPEM), software process ontology.

Grants

PhD Scholarship - Sandwich Doctorate Program Abroad March 2017 - February 2018

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES Scholarship to spend one year working at TU/e granted by the CAPES.

Monetary amount: € 20,490.00 (EUR)

PhD Scholarship - Aid to Student Mobility

October 2016 - January 2017

Fundação de Amparo a Ciência e Tecnologia do Estado de Pernambuco - FACEPE Scholarship to spend 3 months working at TU/e granted by the FACEPE. Monetary amount: R\$ 117,120.00 (BRL)

PhD Scholarship

March 2014 - February 2018

Fundação de Amparo a Ciência e Tecnologia do Estado de Pernambuco - FACEPE Scholarship for my PhD program at UFPE granted by the FACEPE. Monetary amount: R\$ 11,920.00 (BRL)

Awards

Distinguished Reviewer Award

XIV Brazilian Symposium on Software Components, Architectures, and Reuse (SBCARS'2020)

Best PhD Thesis of 2019

Informatics Center from Federal University of Pernambuco

Title: Understanding Confusion in Code Reviews

Best Paper Award

International Conference on Software Analysis, Evolution, and Reengineering (SANER'2019) *Title:* Confusion in Code Reviews: Reasons, Impacts, and Coping Strategies [7]

Distinguished Reviewer Award

XIII Brazilian Symposium on Software Components, Architectures, and Reuse (SBCARS'2019)

Teaching Experience

Department of Mathematics and Computer Science, Eindhoven University of Technology

Course: Programming (BSc) - 2IP90

2021 - 2022 Q1

Teaching Assistant

Duties: Preparation and conduction of on-campus instructions for the Java Programming course for first year students. I worked with a group of about 30 students. The content of the instructions was a quick review of the lecture content and working on collaboration exercises with the students, also helping them on the exercises. Additionally, I was also responsible for managing the Teaching Assistants (students) who helped with the instructions and grading.

Expertise gained: Ability to teach on-campus setting. Additionally, I tried to apply learning theories: such as preparing Learning Outcomes and following the Principles of Instruction, even for every single instruction.

Department of Mathematics and Computer Science, Eindhoven University of Technology

Course: Software/Web Engineering Project course (BSc) - 2IPE0

2020 - 2021 Q3

Teaching Assistant

Duties: Supervision of a software project group, review and grading of the software documents produced by the students. All supervision was on the online setting.

Expertise gained: Ability to teach and supervise students' projects about software development process on the online setting.

Department of Mathematics and Computer Science, Eindhoven University of Technology

Course: Software Evolution (MSc) - 2IMP25

2020 - 2021 Q3

Guest Lecture

Duties: Guest lecture about code reviews and confusion.

Department of Mathematics and Computer Science, Eindhoven University of Technology

Course: Programming (BSc) - 2IP90

2020 - 2021 Q1

Teaching Assistant

Duties: Preparation and conduction of on-campus instructions for the Java Programming course for first year students. I worked with two different groups of students (one with 23 students and another with 13 students). The content of the instructions was a small review of the lecture content and working on collaboration exercises with the students, also helping them on the exercises.

Expertise gained: Ability to teach on-campus setting, while keeping the 1.5m distance rule. Additionally, I tried to apply learning theories: such as preparing Learning Outcomes and following the Principles of Instruction, even for every single instruction.

Department of Mathematics and Computer Science, Eindhoven University of Technology

Course: Software/Web Engineering Project course (BSc) - 2IPE0

2019 - 2020 Q4

Teaching Assistant

Duties: Supervision of a software project group, review and grading of the software documents produced by the students. All supervision was on the online setting.

Expertise gained: Ability to teach and supervise students' projects about software development process on the online setting.

Department of Mathematics and Computer Science, Eindhoven University of Technology

Course: Software Evolution (MSc) - 2IMP25

2019 - 2020 Q4

Guest Lecture

Duties: Guest lecture about understanding confusion in code reviews.

Informatics Center, Federal University of Pernambuco

Course: Software Engineering

2008 Q1-Q4

Student Assistant
Workload: 480 hours

Duties: Preparation and conduction of on-campus instructions for the whole class during the whole semester. Additionally, grading of homework assignments.

Informatics Center, Federal University of Pernambuco

Course: Database 2007 Q1-Q4

Student Assistant
Workload: 480 hours

Duties: Preparation and conduction of on-campus instructions for the whole class during the

whole semester. Additionally, grading of homework assignments.

Informatics Center, Federal University of Pernambuco

Course: Linear and Vector Algebra 2005 Q3-Q4

Student Assistant
Workload: 240 hours

Duties: Preparation and conduction of on-campus instructions for the whole class during the

whole semester. Additionally, grading of homework assignments.

Professional Experience

IBM - Recife, Brazil

Java Developer July 2009 – September 2011

Duties: Development of WEB systems for the control of the websites of IBM customers. Technologies used: Java, Struts, Servlets, Java Server Pages (JSP), Java Server Faces (JSF).

E.life Company – Recife, Brazil

Java Developer August 2008 – July 2009

Duties: Development of client-server systems based on WEB with data base. Technologies used: JAVA, CXF, and MySQL.

Publications

- [12] Gabrielle Porto, Rodrigo Andrade, Felipe Ebert, "A Comparative Analysis Between Information Flow Control Tools for Java-written systems", to appear in the 15th Brazilian Symposium on Software Components, Architectures and Reuse (SBCARS), 2021.
- [11] Felipe Ebert, Fernando Castor, Nicole Novielli, Alexander Serebrenik, "An Exploratory Study on Confusion in Code Reviews", Empirical Software Engineering (EMSE), Vol. 26, Art. 12, pp. 1-48, 2021.
- [10] Felipe Ebert, "From Transient Information to Persistent Documentation: Enhancing Software Documentation", 36th IEEE International Conference on Software Maintenance and Evolution (ICSME), pp. 849-853, 2020.
- [9] Victor Oliveira, Leopoldo Teixeira, Felipe Ebert, "On the Adoption of Kotlin on Android Development: A Triangulation Study", 27th International Conference on Software Analysis, Evolution and Reengineering (SANER), pp. 206-216, 2020.
- [8] Felipe Ebert, Fernando Castor, Alexander Serebrenik, "A Reflection on 'An Exploratory Study on Exception Handling Bugs in Java Programs", 27th International Conference on Software Analysis, Evolution and Reengineering (SANER), pp. 552-556, 2020.

- [7] Felipe Ebert, Fernando Castor, Nicole Novielli, Alexander Serebrenik, "Confusion in Code Reviews: Reasons, Impacts, and Coping Strategies", 26th International Conference on Software Analysis, Evolution and Reengineering (SANER), pp. 49-60, 2019.
- [6] Felipe Ebert, Fernando Castor, Nicole Novielli, Alexander Serebrenik, "Communicative Intention in Code Review Questions". **34th International Conference on Software Maintenance and Evolution (ICSME)**, pp. 519-523, 2018.
- [5] Felipe Ebert, Fernando Castor, Nicole Novielli, Alexander Serebrenik, "Confusion Detection in Code Reviews", 33rd International Conference on Software Maintenance and Evolution (ICSME), pp. 549-553, 2017.
- [4] Marcel Rebouças, Gustavo Pinto, Felipe Ebert, Weslley Torres, Alexander Serebrenik, Fernando Castor, "An Empirical Study on the Usage of the Swift Programming Language", 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER), pp. 634-638, 2016.
- [3] Felipe Ebert, Fernando Castor, Alexander Serebrenik, "An Exploratory Study on Exception Handling Bugs in Java Programs", Journal of Systems and Software (JSS), Elsevier, Vol. 106, pp. 82-101, 2015.
- [2] Irineu Moura, Gustavo Pinto, Felipe Ebert, Fernando Castor, "Mining Energy-Aware Commits", 12th Working Conference on Mining Software Repositories (MSR), pp. 56-67, 2015.
- [1] Felipe Ebert, Fernando Castor, "A Study on Developers' Perceptions about Exception Handling Bugs", 29th International Conference on Software Maintenance (ICSM), pp. 448-451, 2013.

Invited Presentations

- An Exploratory Study on Confusion in Code Reviews, invited for the BENEVOL 2020 (BElgian-NEtherlands software eVOLution symposium), Luxembourg, December 2020.
- Understanding Confusion in Code Reviews, invited by Miguel Botto Tobar as a keynote for the International Conference on Technology Trends, Universidad Técnica de Babahoyo – Ecuador, August 2019.
- **Confusion Detection in Code Reviews**, invited by Jens Krinke for the CREST Open Workshop (COW), University College London UK, November 2017.
- Confusion Detection in Code Reviews, invited for the BENEVOL 2017 (BElgian-NEtherlands software eVOLution symposium), University of Antwerp – Belgium, April 2017.

Reviewer of Journals

- Transactions on Software Engineering (TSE)
- Empirical Software Engineering (EMSE)
- Journal of Systems & Software (JSS)
- IEEE Software
- Science of Computer Programming (Original Software Publications)
- Institution of Engineering and Technology (IET) Software

Program Committee

- Mining Software Repositories Conference (MSR 2022):
 - Technical track

Member

- International Conference on Software Maintenance and Evolution (SANER 2022):
 - Technical track
- International Conference on Program Comprehension (ICPC 2022):
 - Technical track
- International Conference on Software Maintenance and Evolution (ICSME 2021):
 - New Ideas and Emerging Results (NIER) track
 - o Artifact Evaluation track
- Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2021):
 - Artifact Evaluation track
- Mining Software Repositories Conference (MSR 2021):
 - Technical track
 - Data Showcase track
 - Registered Reports track
- International Conference on Automated Software Engineering (ASE 2021):
 - Late Breaking Results track
 - Artifact Evaluation track
- 15th Brazilian Symposium on Software Components, Architectures, and Reuse (SBCARS 2021)
- International Conference on Software Maintenance and Evolution (ICSME 2020):
 - Doctoral Symposium track
- Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2020):
 - Student Research Competition track
- Seminar Series on Advanced Techniques & Tools for Software Evolution (SATTOSE 2020)
- XIV Brazilian Symposium on Software Components, Architectures, and Reuse (SBCARS 2020)
- VIII Workshop on Software Visualization, Evolution and Maintenance (VEM 2020)
- XXXIII Brazilian Symposium on Software Engineering (SBES 2019):
 - o Insightful Ideas & Emerging Results track
- XIII Brazilian Symposium on Software Components, Architectures, and Reuse (SBCARS 2019)
- VII Workshop on Software Visualization, Evolution and Maintenance (VEM 2019)
- The 4th International Conference on Technology Trends (CITT 2018)
- The 3rd International Conference on Technology Trends (CITT 2017)

Organizing Committee

- Hybridization co-chair: Mining Software Repositories Conference (MSR 2022)
 - o Chairs: David Lo, Shane McIntosh, Nicole Novielli
- Co-chair: 1st Workshop on Automated Support to Improve code Readability (AeSIR 2021)
 - o Collocated with ASE 2021
 - Chairs: Felipe Ebert, Fernanda Madeiral, Simone Scalabrino, Fernando Castor, Rocco Oliveto
- Co-chair: 9th Workshop on Software Visualization, Evolution and Maintenance (VEM 2021)
 - Collocated with CBSoft 2021
 - o Chairs: Fernanda Madeiral, Felipe Ebert

Student Volunteer Systems, Programming, Languages and Applications: Software for Humanity (SPLASH 2016)

Master

Rafael Borba Costa dos Santos

2021 - today

student Co-Advisor Master Project

Topic: "Understanding how the combination of atoms of confusion affect program comprehension", Federal University of Pernambuco (with Prof. Fernando Castor).

Mariska Jacobs 2021 – today

Master Project

Topic: "Understanding how questions influence code reviews", Eindhoven University of Technology (with Prof. Alexander Serebrenik, Prof. Nicole Novielli, and Prof. Reed Milewicz).

Eric Arts 2020

Individual Research Project (Capita Selecta)

Topic: "Investigating the usage of the TODO Bot", Eindhoven University of Technology (with Prof. Alexander Serebrenik).

Tianyu Liu 2018

Individual Research Project (Capita Selecta)

Topic: "Confusion analysis in code reviewing", Eindhoven University of Technology (with Prof. Alexander Serebrenik).

Bachelor

Nguyen, Linh

2021 - today

student Co-Advisor Bachelor Research Project

Topic: "Investigating the relationship between atoms of confusion and developer's expression of confusion in code reviews", Eindhoven University of Technology (with Prof. Alexander Serebrenik, Prof. Fernando Castor, and Prof. Mauricio Aniche).

Mariska Jacobs 2021 – today

Bachelor Research Project

Topic: "Investigating the relationship between atoms of confusion and developer's expression of confusion in code reviews", Eindhoven University of Technology (with Prof. Alexander Serebrenik, Prof. Fernando Castor, and Prof. Mauricio Aniche).

Thesis and

Gabrielle Amorim Porto

November 2020

Dissertation Committees

Bachelor thesis - Computer Science

Informatics Center - Federal University of Pernambuco (UFPE)

Topic: "Uma Análise Comparativa Entre Ferramentas de Controle de Fluxo de Informação Para Sistemas Java" (A Comparative Analysis Between Information Flow Control Tools for Java Systems).

Advisor: Rodrigo Cardoso Amaral de Andrade

Willer Amorim Sabino de Araujo

July 2019

Bachelor thesis – Computer Engineering

Informatics Center - Federal University of Pernambuco (UFPE)

Topic: "Análise do potencial de revisão de código em detectar defeitos" (Analysis of the

potential for code review to detect defects). Advisor: Paulo Henrique Monteiro Borba

Languages

- Dutch (beginner in progress)
- English (fluent)
- Portuguese (native language)

Courses

Supervising MSc-Students

March 2021

Eindhoven University of Technology

Workload: 6 hours

Teaching Skills for PhD students

September 2020

Eindhoven University of Technology

Workload: 12 hours

Teaching & Learning in Higher Education

June 2020

Eindhoven University of Technology

UTQ/BKO training program

Workload: 25 hours

Academic Profiles Google Scholar: https://scholar.google.com/citations?user=0_kRyLwAAAAJ

• **DBLP**: https://dblp.uni-trier.de/pers/hd/e/Ebert:Felipe

Social Profiles

Twitter: https://twitter.com/felipe_fifo

• LinkedIn: https://www.linkedin.com/in/felipe-ebert-1830401b3

References' contacts

1. Prof. Alexander Serebrenik:

E-mail: a.serebrenik@tue.nl

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Address: MF 6.087, P.O. Box 513, 5600 MB – Eindhoven, The Netherlands

Phone: +31 40 247 3595 (office)

Website: https://www.win.tue.nl/~aserebre

2. Prof. Fernando Castor:

E-mail: f.j.castordelimafilho@uu.nl Information and Computing Sciences

Utrecht University (UU)

Address: Heidelberglaan 8, 3584 CS - Utrecht, The Netherlands

Website: https://sites.google.com/a/cin.ufpe.br/castor

3. Prof. Nicole Novielli:

E-mail: nicole.novielli@uniba.it Department of Computer Science

University of Bari

Address: Via Orabona, 4 70125, Floor: 6th, room #663 – Bari, Italy

Phone: +39 080 544 3261 (office)

Website: http://collab.di.uniba.it/nicole