

Felipe Ebert

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<https://felipeebert.github.io>

Personal Information *Date of birth:* May 15, 1986
Nationality: Brazilian
Residence: Eindhoven, The Netherlands

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

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: 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.

Academic Experience **Postdoctoral Researcher - Eindhoven University of Technology**
Department of Mathematics and Computer Science **March 2020 - Today**
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

Grants

PhD Scholarship - Sandwich Doctorate Program Abroad

March 2017 - February 2018

Coordination for the Personnel Improvement of Higher Education (*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

Science and Technology Support Foundation of Pernambuco (*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

Science and Technology Support Foundation of Pernambuco (*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: 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 Projects course (BSc) - 2IPEO

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

IBM – Recife, Brazil

Experience *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
- [11] Felipe Ebert, Fernando Castor, Nicole Novielli, Alexander Serebrenik, “*An Exploratory Study on Confusion in Code Reviews*”, **Empirical Software Engineering (accepted)**, 2020.
 - [10] Felipe Ebert, “*From Transient Information to Persistent Documentation: Enhancing Software Documentation*”, to appear in the **36th IEEE International Conference on Software Maintenance and Evolution (ICSME)**, 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)**, 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)**, 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)**, 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)**, 2018.
 - [5] Felipe Ebert, Fernando Castor, Nicole Novielli, Alexander Serebrenik, “*Confusion Detection in Code Reviews*”, **33rd International Conference on Software Maintenance and Evolution (ICSME)**, 2017.
 - [4] Marcel Rebouças, Gustavo Pinto, Felipe Ebert, Wesley 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)**, 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)**, 2015.
 - [1] Felipe Ebert, Fernando Castor, “*A Study on Developers’ Perceptions about Exception Handling Bugs*”, **29th International Conference on Software Maintenance (ICSM)**, 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)
 - IEEE Software
 - Science of Computer Programming (Original Software Publications)
 - Institution of Engineering and Technology (IET) Software
- Program Committee Member
- International Conference on Software Maintenance and Evolution (**SANER 2021**):
 - New Ideas and Emerging Results track
 - Mining Software Repositories Conference (**MSR 2021**):
 - Technical Track
 - Data Showcase
 - Registered Reports
 - International Conference on Automated Software Engineering (**ASE 2021**):
 - Late Breaking Results 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**):
 - 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**)
- Student Volunteer
- Systems, Programming, Languages and Applications: Software for Humanity (**SPLASH 2016**)

Master student	Luc Reinink <i>Individual Research Project</i>	2020 - Now
Co-Advisor	<i>Topic: "Extracting Relevant Comments from Code Reviews", Eindhoven University of Technology (with Prof. Alexander Serebrenik).</i>	
	Eric Arts <i>Individual Research Project</i>	2020
	<i>Topic: "Investigating the usage of the TODO Bot", Eindhoven University of Technology (with Prof. Alexander Serebrenik).</i>	
	Tianyu Liu <i>Individual Research Project</i>	2018
	<i>Topic: "Confusion analysis in code reviewing", Eindhoven University of Technology (with Prof. Alexander Serebrenik).</i>	
Thesis and Dissertation Committees	Gabrielle Amorim Porto <i>Bachelor thesis – Computer Science</i> <i>Informatics Center - Federal University of Pernambuco (UFPE)</i>	November 2020
	<i>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).</i> Advisor: Rodrigo Cardoso Amaral de Andrade	
	Willer Amorim Sabino de Araujo <i>Bachelor thesis – Computer Engineering</i> <i>Informatics Center - Federal University of Pernambuco (UFPE)</i>	July 2019
	<i>Topic: "Análise do potencial de revisão de código em detectar defeitos" (Analysis of the potential for code review to detect defects).</i> Advisor: Paulo Henrique Monteiro Borba	
Languages	<ul style="list-style-type: none"> • Dutch (beginner – in progress) • English (fluent) • Portuguese (native language) 	
Courses	Supervising MSc-Students Eindhoven University of Technology Workload: 6 hours	March 2021
	Teaching Skills for PhD students Eindhoven University of Technology Workload: 12 hours	September 2020
	Teaching & Learning in Higher Education Eindhoven University of Technology Workload: 25 hours	June 2020

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:**
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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: fjclf@cin.ufpe.br
Informatics Center - Federal University of Pernambuco (UFPE)
Address: Av. Jornalista Anibal Fernandes, s/n - Cidade Universitária 50.740-560 – Recife - PE, Brazil
Phone: +55 81 2126 8430 - ext. 4369 - (office)
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
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