# Felipe Ebert

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| Contact Information | Department of Mathematics and Computer Science | *E-mail*: f.ebert@tue.nl |

Department of Mathematics and Computer Science
Eindhoven University of Technology (TU/e)
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The Netherlands
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Personal Information

*Date of birth*: May 15, 1986
*Place of birth*: Carazinho - RS, Brazil
*Nationality*: Brazilian

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, surveys, card sorting, 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, survey, and software repository mining.

**Federal University of Pernambuco, Brazil**
*Informatics Center*
BSc Computer Science                                                                        **September 2009**
- Dissertation Topic: "*Promodeller: Ferramenta de Modelagem de Processo de Software a partir de arquivos no padrão BPMN utilizando Ontologia de Processo*" (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.

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| Research Interests | Software maintenance and evolution, Software ecosystems, Social and technical aspects of software engineering, Mining software repositories, Error handling, Energy consumption. |

**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:* 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) - 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.

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| 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

[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, 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)**, 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.

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| 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) |
| Program Committee Member | • Mining Software Repositories Conference (**MSR 2021**):<br>  o Technical Track<br>  o Data Showcase<br>  o Registered Reports |
| | • International Conference on Automated Software Engineering (**ASE 2021**) - Late Breaking Results |
| | • 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**) |

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| Master student Co-Advisor | **Eric Arts** | **2020 - Now** |

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

**Luc Reinink**                                                                                          **2020 - Now**
*Individual Research Project*
*Topic:* "Extracting Relevant Comments from Code Reviews", Eindhoven University of Technology (with Prof. Alexander Serebrenik).

**Tianyu Liu**                                                                                                    **2018**
*Individual Research Project*
*Topic:* "Confusion analysis in code reviewing", Eindhoven University of Technology (with Prof. Alexander Serebrenik).

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| Thesis and Dissertation Committees | **Gabrielle Amorim Porto** | **November 2020** |

*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

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| Languages | • **Portuguese** (Native Language)<br>• **English** (fluent) |

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| Courses | **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
Workload: 25 hours

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| Academic Profiles | • **Google Scholar**: https://scholar.google.com/citations?user=0_kRyLwAAAAJ<br>• **DBLP**: https://dblp.uni-trier.de/pers/hd/e/Ebert:Felipe |

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| Social Profiles | • **Twitter**: https://twitter.com/felipe_fifo<br>• **LinkedIn:** https://www.linkedin.com/in/felipe-ebert-1830401b3 |

References'
contacts

1. **Prof. Alexander Serebrenik:**
   E-mail: a.serebrenik@tue.nl
   Department of Mathematics and Computer Science - Eindhoven University of Technology
   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 Universitária50.740-560 – 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
   Phone: +39 080 544 3261 (office)
   Website: http://collab.di.uniba.it/nicole