Felipe Ebert

Contact Department of Mathematics and Computer Science Information

Eindhoven University of Technology (TU/e)

Groene Loper 5, 6th floor (MF 6.085)

5612 AE Eindhoven The Netherlands

Webpage: https://felipeebert.github.io

Personal Date of birth: May 15, 1986

Information 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.

E-mail: f.ebert@tue.nl

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.

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.

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, 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.

Invited Presentations

- 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)
- Science of Computer Programming (Original Software Publications)

Program Committee

 International Conference on Software Maintenance and Evolution (ICSME 2020) - Doctoral Symposium track

Member

- 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 Eric Arts 2020 - Now

student

Individual Research Project

Co-Advisor

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).

Thesis and Dissertation

Gabrielle Amorim Porto

November 2020

Committees

Bachelor thesis – Computer Science

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

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

- Portuguese (Native Language)
- English (fluent)

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

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

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

Social

• **Twitter**: https://twitter.com/felipe_fifo

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