EZEQUIEL SCOTT

ezequiel.scott@ut.ee

WORK EXPERIENCE

08.2019 – ...

Lecturer of Software Engineering (Assistant Professor)
Institute of Computer Science, University of Tartu, Estonia

- Research interests: Software Analytics, Agile Software Development, Software Process Improvement, Software Engineering Education
- Collaboration with Estonian companies: LHV Bank, Pipedrive, Singularity Creations
- Teaching:
  - Agile Software Development (MTAT.03.295): responsible of the course, lecturer, course designer, creator of assignments and exams, coordinator of teaching assistants.
  - Software Analytics (LTAT.05.008): lecturer, creator of assignments, exams, and practice sessions.
  - Software Testing (MTAT.03.159): Head of teaching assistants, I updated materials and tools.
  - Software Engineering (LTAT.05.003): Head of teaching assistants, I updated materials and tools.
  - Supervision of students (master and bachelor level)

05.2017 – 07.2019

Research Fellow (Software Engineering)
Institute of Computer Science, University of Tartu, Estonia

- I applied data science to software engineering problems in the context of agile software development (e.g., estimating story points)
- I participated in international projects: NAPIRE, HELENA
- I participated in international conferences
- Teaching:
  - Software Testing (MTAT.03.159): teaching assistant, I updated materials and tools.
  - Software Engineering (LTAT.05.003): teaching assistant, I updated materials and tools.
  - Supervision of students (master and bachelor level)

04.2013 – 04.2017

Teaching Assistant
National University of Central Buenos Aires (UNICEN), Argentina

- Courses (practice sessions):
  - Documentation and Validation Techniques (cod.4.1)
  - Software Engineering I & II (cod.6511)
  - Object Oriented Programming (cod.6311)

WORK EXPERIENCE

03.2012 – 03.2017 | **Junior Researcher – PhD Student**
Software Engineering Research Institute ISISTAN (CONICET-UNICEN), Argentina

- PhD Thesis: "An Adaptive Approach for Training Software Developers in Scrum" – Supervisors: Marcelo Campo and Alvaro Soria
- Courses taken:
  - Service-oriented computing
  - Introduction to planning algorithms
  - Introduction to evolutionary computing
  - Web data mining
  - Separation of concerns
  - Introduction to mobile programming
  - Tools for the development of internet applications
  - Epistemology and methodology of science

03.2011 – 02.2012 | **Software Developer**
GENEOS, Inc., Tandil, Argentina

- I was responsible for extending functionality of the ERP+CRM System Compiere
- Involved in the development of a dashboard for visualizing business metrics

EDUCATION

04.2012 – 12.2016 | **Ph.D. IN COMPUTER SCIENCE**
National University of Central Buenos Aires (UNICEN), Argentina

02.2006 – 03.2012 | **SYSTEMS ENGINEER**
National University of Central Buenos Aires (UNICEN), Argentina

PUBLICATIONS

[1] Marco Kuhrmann, Paolo Tell, Regina Hebig, Jil Ann-Christin Klunder, Jurgen Munch, Oliver Linssen, Dietmar Pfahl, Michael Felderer, Christian Prause, Steve Macdonell, Joyce Nakatumba-Nabende, David Raffo, Sarah Beecham, Eray Tuzun, Gustavo Lopez, Nicolas Paez, Diego Fontdevila, Sherlock Licorish, Steffen Kupper, Guenther Ruhe, Eric Knauss, Ozden Ozcan-Top, Paul Clarke, Fergal Hugh Mc Caffery, Marcela Genero, Aurora Vizcaino, Mario Piattini, Marcos Kalinowski, Tayana Conte, Rafael Prikladnicki, Stephan Krusche, Ahmet Coskuncay, Ezequiel Scott, Fabio Calefato, Svetlana Pimonova, Rolf-Helge Pfeiffer, Ulrik Pagh Schultz, Rogardt Heldal, Masud Fazal-Baqaie, Craig Anslow, Maleknaz Nayebi, Kurt Schneider, Stefan Sauer, Dietmar Winkler, Stefan Biffl, Cecilia Bastarrica, and Ita Richardson. What makes agile software development agile. *IEEE Transactions on Software Engineering*, pages 1–1, 2021.

[2] Ezequiel Scott, Fredrik Milani, Erki Kilu, and Dietmar Pfahl. Enhancing agile software development in the banking sector—a comprehensive case study at lhv. *Journal of Software: Evolution and Process*, 33(7):e2363, 2021.

[3] Ezequiel Scott, Tanel Tõemets, and Dietmar Pfahl. An empirical study of user story quality and its impact on open source project performance. In *International Conference on Software Quality*, pages 119–138. Springer, 2021.

[4] Kadri Daljajev, Ezequiel Scott, Fredrik Milani, and Dietmar Pfahl. A study of the agile coach's role. In *International Conference on Product-Focused Software Process Improvement*, pages 341–348. Springer, 2020.

[5] Mariana Falco, Ezequiel Scott, and Gabriela Robiolo. Overview of an automated framework to measure and track the quality level of a product. In *2020 IEEE Congreso Bienal de Argentina (ARGENCON)*, pages 1–7, 2020.

[6] Mariana Falco, Ezequiel Scott, and Gabriela Robiolo. Overview of an automated framework to measure and track the quality level of a product. In *IEEE Biennial Congress of Argentina (ARGENCON) [in-press]*, 2020.

[7] Sandeep Kaur Kuttal, Yiting Bai, Ezequiel Scott, and Rajesh Sharma. Tug of perspectives: Mobile app users vs developers. *International Journal of Computer Science and Information Security (IJCSIS)*, 18(6), 2020.

[8] Ezequiel Scott, Khaled Nimr Charkie, and Dietmar Pfahl. Productivity, turnover, and team stability of agile teams in open-source software projects. In *2020 46th Euromicro Conference on Software Engineering and Advanced Applications (SEAA)*, pages 124–131. IEEE, 2020.

[9] Ezequiel Scott, Fredrik Milani, and Dietmar Pfahl. Data science and empirical software engineering. In *Contemporary Empirical Methods in Software Engineering*, pages 217–233. Springer, 2020.

[10] Erki Kilu, Fredrik Milani, Ezequiel Scott, and Dietmar Pfahl. Agile software process improvement by learning from financial and fintech companies: Lhv bank case study. In *International Conference on Software Quality*, pages 57–69. Springer, 2019.

[11] Gabriela Robiolo, Ezequiel Scott, Santiago Matalonga, and Michael Felderer. Technical debt and waste in non-functional requirements documentation: An exploratory study. In *Int. Conference on Product-Focused Software Process Improvement*, pages 220–235. Springer, Cham, 2019.

[12] Ezequiel Scott and Dietmar Pfahl. Using developers' features to estimate story points. In *International Conference on Software and System Process*, pages 106–110. ACM, 2018.

[13] Ezequiel Scott and Dietmar Pfahl. Exploring the individual project progress of scrum software developers. In *International Conference on Product-Focused Software Process Improvement*, pages 341–348. Springer, 2017.

[14] Ezequiel Scott, Dietmar Pfahl, Regina Hebig, Rogardt Heldal, and Eric Knauss. Initial results of the helena survey conducted in estonia with comparison to results from sweden and worldwide. In *International Conference on Product-Focused Software Process Improvement*, pages 404–412. Springer, 2017.

[15] Ezequiel Scott, Guillermo Rodríguez, Álvaro Soria, and Marcelo Campo. Towards better scrum learning using learning styles. *Journal of Systems and Software*, 111:242–253, 2016.

[16] Ezequiel Scott, Alvaro Soria, and Marcelo Campo. Adaptive 3d virtual learning environments—a review of the literature. *IEEE Transactions on Learning Technologies*, 10(3):262–276, 2016.

[17] Ezequiel Scott, Alvaro Soria, and Marcelo Campo. A taxonomy-based approach for fault localization in service-oriented applications. *IEEE Latin America Transactions*, 14(5):2348–2354, 2016.

[18] Guillermo Horacio Rodríguez, Ezequiel Scott, Álvaro Soria, and Marcelo Campo. Razonamiento basado en casos para la materialización de arquitecturas orientadas a servicios. In *XLIII Jornadas Argentinas de Informática e Investigación Operativa (43JAIIO)-XV Argentine Symposium on Artificial Intelligence (ASAI)(Buenos Aires, 2014)*, 2014.

[19] Ezequiel Scott, Guillermo Rodríguez, Álvaro Soria, and Marcelo Campo. Are learning styles useful indicators to discover how students use scrum for the first time? *Computers in Human Behavior*, 36:56–64, 2014.

[20] Ezequiel Scott, Guillermo Rodríguez, Álvaro Soria, and Marcelo Campo. Experiences in software engineering education: Using scrum, agile coaching, and virtual reality. In *Overcoming Challenges in Software Engineering Education: Delivering Non-Technical Knowledge and Skills*, pages 250–276. IGI Global, 2014.

[21] Ezequiel Scott, Guillermo Horacio Rodríguez, Álvaro Soria, and Marcelo Campo. El rol del estilo de aprendizaje en la enseñanza de prácticas de scrum: Un enfoque estadístico. In *XIV Simposio Argentino de Ingeniería de Software (ASSE)-JAIIO 42 (2013)*, 2013.

[22] Ezequiel Scott and Alvaro Soria. Localización de fallas dirigida por taxonomıa en aplicaciones orientadas a servicios. 2012.

COLLABORATION IN RESEARCH PROJECTS

2020 – 2022	A Framework and Tool for Monitoring the Software Product Quality. PI: Prof Gabriela Robiolo. Universidad Austral, Argentina.
2018 – ...	NAPIRE: Naming the Pain in Requirements Engineering
2017 – ...	HELENA: Hybrid dEveLopmENt Approaches in software systems development
2017 – ...	Estonian Centre of Excellence in IT (EXCITE) (TK148) University of Tartu, Institute of Computer Science. Director: Prof Jaak Vilo
2015 – 2017	Architectures, scalable and personalizing techniques for hybrid software systems. Program for Encouraging Teaching and Research. SPU. Code: 03/C258
2012 – 2014	Intelligent assistance of users in desktop, web and mobile applications Program for Encouraging Teaching and Research. SPU. Code: 03/C237
2012 – 2013	Visoft-Sur: Software Visualization for assisting software engineers in the development process. Cooperation program between MINCyT[1] and CAPES-Brasil[2]

SERVICE TO PROFESSIONAL COMMUNITY

PC MEMBER	ICSE 2021 – Artifact Evaluation SEAA 2018-2021 – EUROMICRO Conference on Software Engineering and Advanced Applications PROFES 2017-2020 – International conference of Product Focused Software Process Improvement EASEAI 2019 – 1st International Workshop on Education through Advanced Software Engineering and Artificial Intelligence ICSSP 2018 – International Conference on Software Process
PANEL MEMBER	Defences panel for MSc/BSs theses at University of Tartu, Estonia Defences panel for MSc theses at Tallinn Technical University, Estonia
REVIEWER	Journal of Software: Evolution and Process Information and Software Technology Journal of System and Software Computers and Education Teaching and Teacher Education

FUNDING APPLICATIONS

2020	PSG520 application - Personal research funding from the Estonian Research Council - Starting up grant - Project: ”Data-driven decision support for agile software process improvement using project management tools” (unsuccessful)
2019	Dora Plus Action 1.1 Short-term mobility (Barcelona, Spain, Universitat Politècnica de Catalunya)
2017	Dora Plus Action 1.1 Short-term mobility (Innsbruck, Austria, Leopold-Franzens-Universität Innsbruck)
2017	Post-Doctoral Fellowship granted by the National Scientific and Technical Research Council (CONICET) for research activities. Tandil, Buenos Aires, Argentina (not executed)
2015 – 2017	Doctoral Fellowship (Type II) granted by the National Scientific and Technical Research Council (CONICET) for end of PhD studies. Tandil, Buenos Aires, Argentina.
2012 – 2015	Doctoral Fellowship (Type I) granted by the National Scientific and Technical Research Council (CONICET) for PhD studies. Tandil, Buenos Aires, Argentina.

MENTORING

08.2020 - 08.2021	Gunel Ismayilova, Master's Degree. "Adopting DevOps Practices: a Case Study". University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
08.2020 - 06.2021	Behrad Moeini, Master's Degree. "Using pre-trained models to detect semantically equivalent issue reports". University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
08.2020 - 08.2021	Mirlind Murati, Master's Degree. "Compliance Checking of Agile Practices using Jira logs". University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
08.2020 - 06.2021	Kert Maannik, Master's Degree. "uu". University of Tartu, Faculty of Science and Technology, Institute of Computer Science. (co-supervision)
08.2020 - 06.2021	Kert Prink, Master's Degree. "A dashboard to visualize product quality." University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
08.2020 - 08.2021	Karl Toomas Vana, Bechelor's Degree. "„" University of Tartu, Faculty of Science and Technology, Institute of Computer Science. (co-supervision)
09.2019 - 08.2020	Onuche Akor Idoko, Master's Degree, "Automating the Release Planning of Mobile Apps by Including App-Reviews". University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
09.2019 - 08.2020	Muhammad Bilal Shahid, Master's Degree. "Splitting User Stories Using Supervised Machine Learning". University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
09.2019 - 06.2020	Veronika Vlasova, Master's Degree, "An Analysis of the Impact of the Process Improvement at LHV Bank", University of Tartu, Faculty of Science and Technology, Institute of Computer Science. (co-supervision)
09.2019 - 06.2020	Tanel Tõemets, Master's Degree, "Analysing the Quality of User Stories in Open Source Projects", University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
09.2019 - 06.2020	Kiryl Lashkevich, Master's Degree, "Improving Agile Processes with Customized Mission-based Practices. Case Study", University of Tartu, Faculty of Science and Technology, Institute of Computer Science. (co-supervision)
09.2019 - 06.2020	Kadri Daljajev, Master's Degree, "The Role of an Agile Coach", University of Tartu, Faculty of Science and Technology, Institute of Computer Science. (co-supervision)
12.2018 - 01.2020	Tedo Gogoladze, Master's Degree, "The Importance of Personality Traits in Agile Software Development: A Case Study", University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
09.2018 - 04.2020	Khaled Nimr Charkie, Master's Degree, "Focus Factor and Hyper-Productivity of Agile Teams: A Study of 8 Open-Source Projects", University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
09.2018 - 08.2019	Abel Mesfin Cherinet, Master's Degree, "Recommending Issue Reports to Developers Using Machine Learning", University of Tartu, Faculty of Science and Technology, Institute of Computer Science.
03.2015 - 11.2016	Rodrigo Pena and Marcos Suhit. System Engineer's degree (equivalent to MSc Degree) "A Virtual Environment for Teaching Scrum with LEGO". UNICEN, Faculty of Exact Science. (co-supervision)

QUALIFICATIONS

LANGUAGES	Spanish (mother tongue), English (PTE Academic 64/90), French (A2)
CERTIFICATIONS	Machine Learning: Regression (University of Washington) Machine Learning Foundations: A Case Study Approach (University of Washington)
SKILLS	Java, Python, R, C++, PHP, SQL, Latex Pandas, Scikit-learn, Bokeh, Holoviews, Seaborn, Tableau Flask RESTplus, Bootstrap, Django