## BIANCA TRINKENREICH, Ph.D.

biancatrink@gmail.com

http://biancatrink.github.io

+15204705822

Living in Flagstaff, USA

**Work authorizations:** 

USA (EB2-NIW - Green Card), EU (citizen), Brazil (citizen)



# **Research and Data Analytics**

- Planning, manipulation, and analysis of survey questionnaires, focus groups and interviews
- Development of statistical models that provide insights into the user experience (UX), developers experience (DevEX) and facilitate the adoption of novel collaborative practices.
- Applied Machine Learning models for predictions on teams sustainability, performance and productivity (e.g., Attrition, Software Delivery Velocity, and Stability)
- In-depth qualitative analysis and coding procedures
- Storytelling, authoring papers, and presentation of insights
- Grant proposals for research projects

# **Technical IT Project Management**

- Migration of infrastructure and applications to Azure and AWS cloud
- Software development using Agile and Hybrid practices
- RFP/RFI writing to select and hire outsourcing vendors
- Capable of handling incidents with a customer-first focus
- Change and transition management, problem-solving, and conflict management
- OKRs design and strategies to achieve them
- Project Management Office standards, governance, and training
- Strategies to increase members belonging, engagement, and participation
- Experience in IT for different industries (Oil & Gas, Finance, Education, Retail, Healthcare)

# Tools/Skills

- Human Factors on Software Engineering, Computer-Supported Cooperative Work
- Data manipulation using Python and Pandas
- Structural Equation Modeling (SEM)
- Mediation, Moderation, and Multi-group analysis
- Machine Learning using sklearn, Decision Trees, Logistic Regression, and Cluster Analysis

- Qualitative Analysis using Atlas TI for Grounded Theory, Thematic Analysis
- Quantitative Analysis using R, Python, and Smart-PLS
- Public Presentations and Content writing
- DevOps DORA Research and Capabilities
- Jira, MS Project for project and activities tracking

# **Career History:**

- Research Scientist 2 Globant USA (Apr/22 June/23)
- Graduate Research Assistant Northern Arizona University USA (Aug19 Dec 22)
- Global Service Delivery Manager / Vale Brazil (Dec 2011 Jul 2019)
- Technical IT Project Manager and PMO / Rede D'Or São Luiz Healthcare Brazil (Apr 2010 Dec 2011)
- Technical IT Project Manager and People Manager / Cyberlynxx Brazil (Apr 2010 Dec 2011)

## **Talks**

- Open Source Summit Europe, 2023
  - Do I Belong? Investigating Belonging in Open Source through the Sense of Virtual Community
- The Linux Foundation Member Summit, 2022
  - Pots of Gold at the End of the Rainbow: What Is Success for Open Source Contributors?
- DevOpsDays Washington DC, 2022
  - Burnout Risk as Both an Outcome and a Mediator
- Open Source Summit North America, 2022
  - Women's Participation in Open Source
- Open Forum Europe, 2021
  - A diverse set of OSS contributors and their different pots of gold.
- Linux Plumbers Conference, 2021
  - Understanding motivations, goals and challenges faced by the Linux Kernel contributors.
  - Painelist of Diversity, Equity & Inclusion micro conference.
- Professional Development Week for Computing Federal University of Mato Grosso do Sul (FACOM/UFMS), 2021
  - Painelist of Diversity & Inclusion (Empathy and Resilience).
- Software Developer Diversity and Inclusion (SDDI), 2021.
  - Co-leader discussion about Women in Open Source Software projects
- Guest Lecture at Federal University of Technology Paraná (UTFPR), 2021.

#### **Education**

• I hold a Computer Science Doctor of Philosophy (Ph.D.) from Northern Arizona

University, USA (graduated with distinction), a Computer Science Master of Science (Ms.C.) from Federal University of Rio de Janeiro, Brazil (graduated with honors), and a Software Quality Assurance (MBA) from Federal University of Rio de Janeiro, Brazil. I also have a Bachelor of Computer Science from Centro Universitário da Cidade (UniverCidade), Brazil.

#### Service:

• SDDI Steering Committee Member / The Linux Foundation (Jan 2023 - present)
Software Developer Diversity and Inclusion (SDDI) project:
<a href="https://www.linuxfoundation.org/blog/lean-in-to-the-linux-foundations-software-develop">https://www.linuxfoundation.org/blog/lean-in-to-the-linux-foundations-software-develop</a>
er-diversity-and-inclusion-sddi-project.

Explore, evaluate, and promote best practices from research and industry to increase diversity and inclusion in software engineering. Address research methods, ethics, resources, and data, as well as diversity in the areas of gender, age, cognitive ability, and education.

# • Program Committee of conferences:

SANER 2024 Technical track, MSR 2022/2023/2024 - Technical track, ICSE
 2023 - Demo track, ASE 2022 - Late Breaking Results track, EASE 2022 - Vision and Emerging Results track

# • Reviewer for journals:

 Transaction of Software Engineering (TSE) 2022/2023, Empirical Software Engineering (EMSE) 2023, Software Quality Journal (SQJ) 2022, IEEE Software 2022, ACM Conference On Computer-Supported Cooperative Work And Social Computing (CSCW) 2023

## **Certifications**

I am certified in Project Management Professional (PMP), ITIL v3: IT Service Management Foundation, and AWS Certified Cloud Practitioner.

### **Awards**

I have received awards as author and as reviewer, including the 2023 ACM SIGSOFT Distinguished Paper Award - ICSE Technical Track, 2022 IEEE Best Paper Award - ICSE SEIS Track, and 2021 Outstanding Graduate Student in the School of Informatics, Computing, and Cyber Systems. I was also a finalist of the Student Research Competition of the International Conference on Software Engineering, and I won the NAU Poster Competition – "Please Don't Go: Increasing Women in Open Source" in 2021. Additionally, I received an Honorable Mention Paper Award in 2020. As a reviewer, I received 2023 ACM SIGSOFT Distinguished Reviewer - MSR (Mining Software Repositories) Technical Track

## Publications

# **Journal Papers**

- ★ 2023 SANTOS, F., VARGOVICH, J., **TRINKENREICH, B.**, SANTOS, I., PENNEY, J., BRITTO, R., ... & GEROSA, M., Tag that issue: Applying API-domain labels in issue tracking systems **Empirical Software Engineering EMSE**
- **★**2022 **TRINKENREICH, B.**, WIESE, T., GEROSA, M., SARMA, A., STEINMACHER, I., Women's Participation in Open Source Software **ACM Transactions of Software Engineering and Methodology (TOSEM)**.
- ★2021 **TRINKENREICH, B.**, GUIZANI, G., WIESE, I., CONTE, T., GEROSA, M., SARMA, A., STEINMACHER, I., Pots of Gold at the End of the Rainbow: What is Success for Open Source Contributors?, **IEEE Transactions of Software Engineering (TSE)**
- ★STEINMACHER, I., BALALI, S., TRINKENREICH, B., GUIZANI, M., IZQUIERDO-CORTAZAR, D., ZAMBRANO, G., GEROSA, M., SARMA, A., Being a mentor in Open Source projects, **Journal of Internet Services and Applications**
- ★2018 **TRINKENREICH, B.**, SANTOS, G., BARCELLOS, 2018, "SINIS: A GQM+Strategies-based Approach for Identifying Goals, Strategies and Indicators for IT Services". *Information and Software Technology*, v. 100, p. 147-164.
- 2015 **TRINKENREICH, B.**, SANTOS, G., "Evaluation of measurement process on a Global Organization under the light of MR-MPS-SV maturity model", iSys Brazilian Journal of Information Systems, vol 8 issue 2: pp. 58-77.

### **Peer-Reviewed Conference and Workshop Papers**

- ★ 2023 TRINKENREICH, B., STOL, K., SARMA, A., GERMAN, D., GEROSA, M., STEINMACHER, I. "Do I Belong? Modeling Sense of Virtual Community Among Linux Kernel Contributors". 45th ACM/IEEE International Conference on Software Engineering (ICSE) Technical Track (Distinguished Paper Award)
- ★ 2023 **TRINKENREICH, B.**, STOL, K., STEINMACHER, I., GEROSA, M. SARMA, A., LARA, M., FEATHERS, M., ROSS, N., BISHOP, K. "A Model for Understanding and Reducing Developer Burnout". 45th ACM/IEEE International Conference on Software Engineering (ICSE) Software Engineering in Practice (SEIP) Track
- ★ 2022 SANTOS, F., **TRINKENREICH, B.**, PIMENTEL, J. F., WIESE, I., STEINMACHER, I., SARMA, A., & GEROSA, M. A. "How to choose a task? Mismatches in perspectives of newcomers and existing contributors.".

  16th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)
- ★ 2022 **TRINKENREICH, B.**, STEIMACHER, I., GEROSA, M., FEATHERS, M., BISHOP, K., LARA, M., ROSS, N., SANCHO, E., SARMA, A. "Organization culture and burnout in software development teams". 16th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM) Industry Forum
- ★ 2022 GUIZANI, M., **TRINKENREICH, B.**, CASTRO-GUZMAN, A. A., STEINMACHER, I., GEROSA, M., & SARMA, A. "Perceptions of the State of D&I and D&I Initiative in the ASF" IEEE/ACM 44th International Conference on Software Engineering (ICSE) SEIS

- ★ 2022 **TRINKENREICH, B.,** BRITTO, R., GEROSA, M., STEIMACHER, I., "An Empirical Investigation on the Challenges Faced by Women in the Software Industry". IEEE/ACM 44th International Conference on Software Engineering (ICSE) SEIS 2022 (**Best Paper Award**)
- ★ 2021 GUIZANI, M., CHATTERJEE, A., **TRINKENREICH, B.**, MAY, M. E., NOA-GUEVARA, G. J., RUSSELL, L. J., ... & SARMA, A.., The Long Road Ahead: Ongoing Challenges in Contributing to Large OSS Organizations and What to Do. 24th Computer Supported Cooperative Work (CSCW)
- ★ 2021 **TRINKENREICH**, **B.**, "Please Don't Go Increasing Women's Participation in Open Source Software". Finalist of Student Competition of the 43rd International Conference on Software Engineering (ICSE)
- ★ 2021 **TRINKENREICH**, **B.**, "Please Don't Go Comprehensive Approach to Increase Women's Participation in Open Source Software". Doctoral Symposium of the 43rd International Conference on Software Engineering (ICSE)
- ★ 2021 GEROSA, M., WIESE, I., **TRINKENREICH, B.**, LINK, G., ROBLES, G., TREUDE, C., STEINMACHER, I., SARMA, A., "The Shifting Sands of Motivation: Revisiting What Drives Contributors in Open Source". 43rd International Conference on Software Engineering (ICSE)
- ★ 2021 SANTOS, F., WIESE, I., **TRINKENREICH, B.**, STEINMACHER, I., SARMA, A., GEROSA, M., "Can I Solve It? Identifying APIs Required to Complete OSS Tasks". Mining Software Repositories (MSR)
- ★ 2020 TRINKENREICH, B., GUIZANI, M., WIESE, I., SARMA, A., STEINMACHER, I., "Hidden Figures: Roles and Pathways of Successful OSS Contributors". 23rd Computer Supported Cooperative Work (CSCW) (Honored Mention Paper Award)
- ★ 2020 BALALI, S., ANNAMALAI, U., PADALA, S., **TRINKENREICH, B.**, GEROSA, M., STEINMACHER, I., SARMA, A., "Recommending Tasks to Newcomers in OSS Projects: How Do Mentors Handle It?". 16th **International Symposium on Open Collaboration**. (**Best Paper Award**)
- ★ 2019 TRINKENREICH, B., SANTOS, G., BARCELLOS, M., CONTE, T., "Combining GQM+Strategies and OKR Preliminary Results from a Participative Case Study in Industry". 20th International Conference on Product-Focused Software Process Improvement (PROFES)
- 2018 FERREIRA, E., **TRINKENREICH, B.**, SANTOS, G., BARCELLOS, M., "Using SINIS and GQM+Strategies to Align Organizational Goals and Service Level Agreement Indicators". 17th Software Quality Brazilian Conference (SBQS), Curitiba, Brazil (**Best Paper Award**)
- ★ 2018 TRINKENREICH, B., SANTOS, G., BARCELLOS, M., CONTE, T., "Defining, Measuring and Monitoring IT Service Goals and Strategies Practical Results and Pitfalls from a Qualitative Study in Industry". 12th Empirical Software Engineering and Measurement (ESEM)
- ★ 2017 TRINKENREICH, B., SANTOS, G., BARCELLOS, M., CONTE, T., 2017, "Eliciting Strategies for the GQM+Strategies Approach in IT Service Measurement Initiatives". 11th Empirical Software Engineering and Measurement (ESEM)
- 2017 **TRINKENREICH, B.**, SANTOS, G., BARCELLOS, M., "SINIS A method to support defining goals, strategies and indicators for IT Services CTDQS Competition of Best Thesis and Dissertations about Software Quality 16th Software Quality Brazilian Conference (SBQS) (**Top 3 finalist of Best MSc Thesis Award**)
- ★ 2015 TRINKENREICH, B., SANTOS, G., BARCELLOS, M., "SINIS A Method to Select Indicators for IT Services", 16 th International Conference on Product-Focused Software Process Improvement (PROFES), Bolzano, Italy, pp. 68-86 (Indicated for Best Paper Award)

- **TRINKENREICH, B.**, SANTOS, G., "Evaluation of incident management process under the light of MR-MPS-SV maturity model and measurement to support IT Service quality improvement", 14th Software Quality Brazilian Conference (SBQS)
- **TRINKENREICH, B.**, SANTOS, G., CONFORT, V., SANTORO, F., "Toward using Business Process Intelligence to Support Incident Management Measures Selection and Service Improvement". 27th International Conference Software Engineering Knowledge Engineering (SEKE)
- **TRINKENREICH, B.**, SANTOS, G., BARCELLOS, M., "Measures to Support IT Service Maturity Models A Systematic Mapping Study", 17th International Conference on Enterprise Information Systems (ICEIS)
- **TRINKENREICH, B.**, SANTOS, G., "Measures to Support IT Service Maturity Models A Case Study", 17th International Conference on Enterprise Information Systems (ICEIS)
- **TRINKENREICH, B.**, SANTOS, G., "Evaluation of measurement process for incidents, continuity and availability management under the light of MR-MPS-SV maturity model", 10th Annual workshop for software and services Quality improvement (WAMPS) (Best Paper Award)