

Informed Consent Form (ICF)

Study title: Integrating Ethics into the Software Development Lifecycle

Principal Investigator:

- Dr. Luciana Brasil Rebelo dos Santos - Gran Sasso Science Institute (GSSI), Italy (luciana.rebelo@gssi.it)

Co-investigators:

- Prof. Dr. Érica Ferreira de Souza - Federal University of Technology - Paraná (UTFPR), Brazil (ericasouza@utfpr.edu.br)
- Prof. Dr. Gláucia Braga e Silva - Federal University of Viçosa (UFV), Brazil (glaucia@ufv.br)
- Otávio Santos Gomes - Federal University of Viçosa (UFV), Brazil (otavio.s.gomes@ufv.br)
- Prof. Dr. Nandamudi Lankalapalli Vijaykumar - Brazilian National Institute for Space Research (INPE), Brazil (vijay.nl@inpe.br)

Study setting: Online (Google Forms)

INFORMATION FOR PARTICIPANTS

You are invited to participate in the research study identified above. This document provides the information necessary to decide whether to participate. Advances in computing, particularly in artificial intelligence, have intensified the need for ethical considerations. Ethical issues such as privacy, transparency, and fairness have gained prominence, yet how they are integrated into software development remains unclear. In this study, we aim to understand how ethical principles are being integrated and/or applied throughout the software development lifecycle in the software industry.

In the context of this research, **software engineering ethics refers to the practical decisions** that those responsible for software development make and that **can significantly affect other people**. Contemporary examples, such as human-resources résumé-screening systems that may rank candidates in a discriminatory manner, illustrate these consequences.

1) Research objective

This study seeks to understand practices, perceptions, and challenges related to integrating ethics across the software development lifecycle among professionals working in industry. Based on the responses, we aim to obtain a clearer picture of current industrial practice, identify patterns and gaps, and highlight opportunities for further discussion.

2) What you will be asked to do

You will complete an online questionnaire containing multiple-choice questions and a few optional open-ended questions. The estimated completion time is approximately 20–25 minutes. Data will be collected anonymously, ensuring the confidentiality of responses.

3) Risks and discomforts

Risks are minimal and are limited to potential discomfort from reflecting on professional experiences. You may skip any non-mandatory question.

4) Expected benefits

The results may support good practices, guidelines, and education on integrating ethics in software development. There are no direct financial benefits to participants. The results will be triangulated with previously collected evidence from the literature, enabling a comparative analysis between practice and theoretical approaches reported in academic studies. This triangulation supports a deeper understanding of industry challenges and of gaps that remain to be investigated regarding the practical integration of ethics in software engineering.

5) Voluntariness and right to withdraw

Your participation is **voluntary**. You may stop at any time, without providing justification, simply by closing the form. Incomplete responses will not be used.

6) Privacy, confidentiality, and personal data

- We will not request identifiable personal data (such as full name, national ID number, or address), except if you **choose** to provide an email address for potential future contact (optional).
- Responses will be analyzed in aggregate in an **anonymous** and **confidential** manner.
- Data will be stored in a secure environment and used exclusively for academic/scientific purposes.
- We will process any personal data in accordance with the **General Data Protection Regulation (GDPR) 2016/679**. You may request access to, rectification of, or deletion of any personal data you have provided, withdraw consent (where applicable), and exercise other GDPR rights by contacting the research team via the contact below.

7) Use and sharing of results

Results may be published in reports, articles, and presentations, always in aggregated form and without identifying individuals or organizations.

8) Eligibility

This research is intended for individuals aged 18 years or older. By proceeding, you confirm that you meet this criterion.

9) Questions and contact

If you have questions before, during, or after participation, you may contact us at luciana.rebelo@gssi.it.