



# 3<sup>rd</sup> International Workshop on Natural Language-Based Software Engineering (NLBSE 2024)

*Co-located with ICSE: April, 2024  
Lisbon, Portugal*

<https://nlbse2024.github.io/>

## Important Dates

**December 7<sup>th</sup>, 2023: Paper submission**  
**December 9<sup>th</sup>, 2023: Tool paper submission**  
December 29<sup>th</sup>, 2023: Tool paper notification  
January 11<sup>th</sup>, 2024: Author notification  
January 25<sup>th</sup>, 2024: Camera-ready

## Organizing Committee

**Maliheh Izadi** (TU Delft, Netherlands)  
**Andrea Di Sorbo** (University of Sannio, Italy)  
**Sebastiano Panichella** (ZHAW, Switzerland)

## Research Topics

Papers should address a problem in the software engineering domain or combine elements of NLP research with other concerns in the software engineering lifecycle, such as:

- Key information identification and extraction from natural language software artifacts
- Elicitation, modeling, and verification of requirements
- Classification, summarization, and prioritization of development tasks
- Code understanding, summarization, generation, and representation

Solutions should apply NLP-based approaches and/or models such as:

- Textual analysis
- Text and code summarization/abstraction
- Topics or aspects modeling and extraction
- Machine translation
- Natural language parsing/generation
- Semantic parsing
- Discourse analysis

We are pleased to announce the 3<sup>rd</sup> workshop on Natural Language-Based Software engineering (NLBSE) held in Lisbon, Portugal. Natural language processing (NLP) refers to automatic computational processing of human language, including both algorithms that take human-produced text as input and algorithms that produce natural-looking text as outputs. There is a widespread and growing usage of NLP approaches to optimize many aspects of the development process of software systems. Indeed, during the software development lifecycle, natural language artifacts are used and reused. The availability of large language models (LLMs), natural language-based approaches, and tools enabled the envisioning of methods for improving efficiency in software engineers, processes, and products.

This workshop aims to bring together researchers and industrial practitioners from NLP and software engineering communities to collaborate, share experiences, provide directions for future research, and encourage the use of NLP techniques and tools for addressing software engineering-specific challenges.

**We invite full research papers (8 pages), education materials (8 pages), replication studies (8 pages), short and demonstration papers (4 pages), position or early-stage research papers (2 pages), and tool competition entries (4 pages).**

## Tool Competitions

We are also pleased to announce the third edition of the issue classification tool competition, and the second edition of the code comment classification tool competition. Researchers, students, and tool developers are invited to leverage datasets extracted from real-world open source projects for training and evaluating their approaches targeting the automated classification of (i) issue reports and (ii) code comments and compare the achieved results against proposed baseline tools. Please see our website for more details: <https://nlbse2024.github.io/tools/index.html>