# Mapping Systematic: where to go next in Brazilian research and practice on transparency through software?

# José Soares Barroso Júnior<sup>1</sup>, Bruna Diirr<sup>1</sup>, Vanessa Nunes<sup>2</sup>, Claudia Cappelli<sup>3</sup>

<sup>1</sup>Graduate Program in Informatics – Federal University of the State of Rio de Janeiro (UNIRIO) – Rio de Janeiro, RJ – Brazil

<sup>2</sup>Computer Science Department - University of Brasília (UnB) - Brasília, DF - Brazil

<sup>3</sup> Graduate Program in Informatics — Federal University of Rio de Janeiro (UFRJ) — Rio de Janeiro, RJ — Brazil {jose.junior,bruna.diirr}@uniriotec.br, vanunes@gmail.com, claudia.cappelli@gmail.com

This paper aims to investigate the Brazilian research efforts and evolution on software transparency. This study was based on publication from researchers from Brazilian Institutions, published in national and international academic journals or presented in scientific events that investigate software transparency.

The purpose is to characterize the existing approaches, identify results obtained so far, and identify challenges and opportunities in order to support research in this domain.

# **Planning**

Investigate the brasilian research literature on software transparency.

#### **PICOC**

• **Population:** transparency

• **Intervention:** software

- Comparison:
- Outcome:
- Context:

# **Research Questions**

1. What are the researches dealing with software transparency in Brazil?

# **Keywords and Synonyms**

Keyword Synonyms

software aplicação, application, e-gov, e-

service, information technology, serviço eletrônico, sistema, system,

tecnologia da informação

transparency transparência

# **Search String**

(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND (YEAR >= 2009) AND (INSTITUTION = Brazil OR Brasil)

#### **Sources**

- ACM Digital Library (http://portal.acm.org)
- El Compendex (http://www.engineeringvillage.com)
- Google Scholar (http://scholar.google.com.br)
- IEEE Digital Library (http://ieeexplore.ieee.org)
- ISI Web of Science (http://www.isiknowledge.com)
- Science@Direct (http://www.sciencedirect.com)
- Scopus (http://www.scopus.com)
- Springer Link (http://link.springer.com)

#### **Selection Criteria**

#### **Inclusion Criteria:**

- Focus on automation to support organizational transparency
- Focus on Software Transparency

#### **Exclusion Criteria:**

- Focus on other subjects
- Focus on other transparency subjects
- Full document not available
- In the form of editorial, abstract, keynote or a poster
- Not written by researchers from Brazilian Institutions
- Repeated document (only the most complete one will be kept)

# **Quality Assessment Checklist**

# **Questions:**

- Does the paper presents a proposal?
- Does the paper present the development / prototype of a solution for the proposal?

• Does the paper present an evaluation of the proposal?

#### **Answers:**

- Yes
- No

#### **Data Extraction Form**

- State
- Region
- Áreas de interesse
- Transparency characteristics
- Areas of Interest
- Research focus

# **Conducting**

# **Digital Libraries Search Strings**

# **ACM Digital Library:**

(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND (YEAR >= 2009) AND (INSTITUTION = Brazil OR Brasil)

# **El Compendex:**

(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND (YEAR >= 2009) AND (INSTITUTION = Brazil OR Brasil)

# **Google Scholar:**

(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND (YEAR >= 2009) AND (INSTITUTION = Brazil OR Brasil)

# **IEEE Digital Library:**

(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND (YEAR >= 2009) AND (INSTITUTION = Brazil OR Brasil)

#### ISI Web of Science:

(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND (YEAR >= 2009) AND (INSTITUTION = Brazil OR Brasil)

# Science@Direct:

All(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND pub-date AFT 20090101 AND affil(Brazil OR Brasil)

# Scopus:

(transparency OR transparência) AND (software OR aplicação OR application OR "information technology" OR sistema OR system OR "tecnologia da informação") AND (YEAR >= 2009) AND (INSTITUTION = Brazil OR Brasil)

# **Springer Link:**

#### **Imported Studies**

• ACM Digital Library: 155

• El Compendex: 976

• Google Scholar: 1967

IEEE Digital Library: 144
ISI Web of Science: 424

• Science@Direct: 536

• **Scopus:** 384

• **Springer Link:** 1680