**6th PPgSI’s Dissertations Workshop**

**2019**

**Title of master's project**

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| Author: | Fulana de tal |
| Advisor: | Ciclana de tal, Dr. |
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| Research lines:  | [ ] Systems Development and Management | [ ] Systems Intelligence |
| Research areas: | [ ] Database | [ ] Software engineering | [ ] Artificial intelligence | [ ] Graphics processing |
| [ ] Information technology management | [ ] Human-Computer Interaction | [ ] Pattern recognition | [ ] Optimization |
| Application areas: | [ ] Enterprise environments / Business processes | [ ] Bioinformatics | [ ] Biometrics | [ ] Mobile devices |
| [ ] Economy | [ ] Education / Distance learning | [ ] E-government  | [ ] Internet / Social Networks |
| [ ] Games / Serious games | [ ] Linguistics / Natural Language | [ ] Cheminformatics | [ ] Robotics |
| [ ] Health | [ ] Other Which? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |  [ ] General\*  |
| \* Check "GENERAL" if your research is not directed at any particular application area, i.e., it is exclusively focused on the research area stated above. To be sure this is your case, make sure that the result you expect to produce contributes indirectly to **any** area of application of information systems/computer science. For example, your research enhances a software testing technique, proposes a new data structure or establishes a heuristic to parameterize a machine learning algorithm. Note that in such cases, the output produced can be useful for any social problem in which automated solutions are needed. **(REMOVE THIS LINE IN THE *CAMERA READY* OF THIS DOCUMENT)** |
| Period in the program (at the workshop date): | [ ] 2nd semester | [ ] 3rd semester | [ ] 4th semester | [ ] 5th semester |
| Qualifying: | [ ] Qualifying held in: dd/mm/yyyy | [ ] Plan for qualifying in: dd/mm/yyyy  |
| Defense: | Deadline for deposit: dd/mm/yyyy | Plan for defending in: dd/mm/yyyy |
| Publications associated with the master's project: | * Bibliographic reference for my publication 1
* Bibliographic reference for my publication 2

If you do not have publications by the deadline for submitting this document, please fill in this field with: **No publications to date.** |

**Keep this information organized on a single page. Please, remove this comment in the *camera ready* version.**

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| **The research project summary** |
| **Context:** Research can be embedded in different contexts, however, the factors listed below (or part of them) should be part of the context of your research. Reflect on them and write a text that defines the context in which the phenomenon of interest in your research lies. The text should be clear, objective, complete and concise.* Problems: What is the class of the problem you are working on? What characteristics of this class interest you? What kind of application does this class of problems have? Do any of them interest you in particular?
* People: What kinds of roles, capabilities or characteristics define the people who will benefit from the results of your research?
* Organizations: Will your research benefit organizations? In terms of strategies, structure, culture or processes? Discuss these points.
* Technologies: Is your research related to technology for infrastructure? Does it generate conditions for building applications? Does your research propose / extend / evaluate architectures / models? Is it about improving the capabilities of existing technologies?

Your final text will show the reader how you perceive your research problem. |
| **Research problem:** State that the problem you understand is not resolved or is not completely resolved or is not adequately addressed. Explain what the problem or facet of the problem you are interested in. The text should be clear, objective, complete and concise. |
| **Research objective:** You notice that there is a problem (presented in the previous item), and you want to solve it entirely or partly. Set here what you need to accomplish to provide a solution (new, improved or adapted) to the problem. Keep in mind that a goal should always be verifiable. You need to delineate it so that it is possible to verify that what you will develop to the end of your project will, in fact, be what you promised. In some contexts, the goals described with the verbs STUDY, EXPLORE are not verifiable. Verbs like PROPOSE, PRESENT are difficult to verify if they are not accompanied by an indicator to certify if you have reached the expected quality level. It would be better to use verbs such as DEMONSTRATE, PROVE, COMPARE. Even using such verbs, it is still necessary to indicate the level of quality that you expect in relation to the improvement or suitability of a solution. |
| **Characteristics of the proposed solution:**Use this field to outline your solution. In this description, you can specify techniques and algorithms or mathematical resources that you intend to apply, models that you intend to follow, programming language or alternative technologies you have chosen to employ IF those choices ARE CRUCIAL to achieve your goal (if you are using Java or Python to implement an algorithm and this is just a choice of convenience, this will not be decisive for the success of your solution), type of experiment that you will perform for the case of research in which the experiment itself and the effect it produces is part of the phenomenon under analysis (and it is not just a means to produce data for validation of your solution).   |
| **Theoretical foundations:** List the theories that form the basis for building your solution.  |
| **Correlated works:*** Bibliographic reference for correlated work 1
* Bibliographic reference for correlated work 2
* Bibliographic reference for correlated work 3

List three scientific papers in which the phenomenon of analysis is similar to yours. You are expected to list papers that represent a basis for comparing the efficiency of the solution you are proposing. |
| **Validation**Cite strategies, methods and/or measures that will be used to validate the results of your work. |
| **Limitations, risks, and threats:**You are the person who has the best conditions to criticize your work. There are no perfect solutions. Here, you must present the limits of your solution and the risks or threats to which your research is exposed. Examples: size of the problem, type of information, fragility of a choice made to implement the solution, negative cost-benefit relations under some aspect, low statistical validity, homogeneity of subjects in the research, hardware inaccuracy, social/cognitive conditions of humans which produce data for analysis. In your text, cite the limitations, risks or threats in a contextualized way. |
| **Scientific contribution:**We use to say that you have a scientific contribution when you can develop new knowledge and open doors for more problems to be identified, more solutions to be found and more new knowledge to be produced. Reflecting on this, point out the scientific contribution you intend to offer at the end of your research. |
| **Technical contribution (if pertinent):**Artifacts created (or to be created) by you as a result of your research, and that will somehow be accessed by people, organizations or systems. This access may occur in terms of use or observation. It is important that the artifact is available and in conditions to cause some effect. Provide a brief description of the artifacts. |

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| **The research method** |
| Genre (choose ONE) | [ ] Theoretical research | [ ] Practical research | [ ] Empirical research | [ ] Methodological research |
| Nature (choose ONE) | [ ] Basic research | [ ] Applied research |
| Approach (choose ONE) | [ ] Quantitative research | [ ] Qualitative research | [ ] Quali-quanti research |
| Literature review\* (you can choose more than one) | [ ] Narrative review[ ] Descriptive review[ ] Scoping review | [ ] Meta-analysis[ ] Qualitative systematic review[ ] Umbrella review | [ ] Theoretical review[ ] Realistic review[ ] Critical review |
| Main technical procedure (choose ONE) | [ ] Experimental research[ ] Bibliographic research[ ] Documental research[ ] *Ex-post-facto* research | [ ] *Survey*[ ] Case study[ ] Participatory research[ ] Research-action | [ ] Ethnographic research[ ] Grounded theory[ ] Design science[ ] Other Which? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Data analysis (you can choose more than one) | [ ] Descriptive statistics[ ] Inferential statistics | [ ] Statistical test[ ] Content analysis | [ ] Discourse analysis[ ] Others: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

\* Definition of types of literature reviews established by Paré, G., Trudel M-C., Jaana M., Kitsiou, S. Synthesizing Information systems knowledge: A typology of literature reviews. In: Information & Management 52, p. 183-199, 2015. DOI: 10.1016/j.im.2014.08.008

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| **Next steps**: List which activities you have planned for the continuity of your research. |

**Keep the information regarding the RESEARCH PROJECT SUMMARY and the RESEARCH METHOD organized in no more than two pages. Remove that remark in the *camera ready* version.**

**Optional:** Provide a graphic layout that shows aspects of your research. For example: a flow-chart for building your solution or an infographic for your research proposal. If necessary, use the fourth page.

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