University *of Ljubljana*
Faculty *of Computer and Information Science*

Concise and short, however sufficiently descriptive title in English

(Corresponding title in Slovene)

Name and Surname of the doctoral candidate
Affiliation

DOCTORAL DISSERTATION PROPOSAL

Scientific field: computer and information science

Summary. At the beginning of the document, you can summarize the main highlights of the doctoral dissertation proposal. Then, in the following sections, first introduce the reader to the research field, which should be then explored in more detail, identify the research problem and set the research goals, *i.e.*, specify what you would like to achieve, then describe how do you methodologically plan to achieve this, and derive the corresponding expected contributions to science.

1 Introduction

In the introductory section (which can also be renamed in, *e.g.* Description of the narrow research field), briefly describe the specialised research area, which will be the topic of research and where the contributions to science are expected, focusing on the problems you intend to address in the dissertation. Introduce the reader to the field, give the motivation for your work.

2 Related work review

Explore the literature in the field of planned research field and provide a critical comparative analysis of the most related publications. Include and focus on the state-of-the-art publications related to the proposed. Highlight the advantages and disadvantages of the related methods. This analysis should form the basis for your research and point to opportunities for novel contributions to science. The literature review should also indicate the contemporaneity and relevance of the research field, thus justifying the topic of the proposed research.

3 Research questions and objectives

Concisely describe the research problem and the questions you will address in your doctoral dissertation. Set clear and measurable objectives. Alternatively, you can also list research hypotheses that you plan to confirm or reject in your doctoral dissertation. Show that the problem exists, that other researchers have not yet solved it, but that the problem is interesting and important and worth dealing with.

4 Methods

Describe the scientific methodology of the research work; how you will conduct research, how you will measure the performance of the developed methods, *etc.* Describe which methods you intend

to use and develop to solve the given research problem and indicate in which direction your research work will be oriented. You probably do not have fully developed methods at this stage, as they will be the subject of your research, but you certainly have at least a rough idea of how you will solve the problem. Show the reader that you know how to address the problem and that you are also capable of solving it.

4 Expected contributions to science

Describe the original contributions to science that you intend to achieve in your doctoral dissertation. This is the most important section of the doctoral dissertation proposal. List up to three expected contributions to science, typically each in a short paragraph (or bullet-point list), and justify each one individually in terms of originality, feasibility, and evaluation methodology.

Note that the contributions to science are original methods and approaches that you will develop and that contribute to the development of the chosen scientific field. An individual contribution is an integral work, which can be published in a reputable scientific journal.

Please note that the below-listed contributions do **not** qualify as contributions to science:
• Implementation of known methods.
• Solving a practical problem with known methods.
• The programme developed by the candidate to implement the suggested methods (it is only a supporting work needed to demonstrate the feasibility and practicality of the proposed method);
• Evaluation of the proposed methods and approaches.

Interdisciplinary doctoral students are expected to have most of the contributions in the field of computer and information science.

Literature

Conclude your doctoral dissertation proposal with a list of literature that should not be unnecessarily long. Each reference must be cited in the text of the proposal.

Remark

This document contains a template for the doctoral dissertation proposal, which includes all the elements required by the Rules on Doctoral Studies at the University of Ljubljana. You can also present this content in differently named and ordered sections. The format of the document itself may also be altered. You can, *e.g.* create a title page from the title and the basic information. It is important, however, that the proposal contains all these elements (including the identification of research questions and objectives), which will be assessed by the Committee to monitor the doctoral candidate. Avoid abbreviations in the title, make sure that the Slovenian and English titles are grammatically correct and consistent with each other. The entire document should contain 3 to 5 pages without the bibliography (and the title page, if any). If your mother tongue is Slovene, you must also enclose a Slovene version of the doctoral dissertation proposal of the same content.