## Department of Computer Science and Engineering College of Engineering, University of Nevada, Reno

## CS 791 Graduate Topics in Computer Science [Software Engineering]

## **Assignment #4**

## Selected Research Area: Background Essay

October 14, 2019

**Due:** Thursday, October 24, 11:59 pm (by email)

Single PDF file, named A4\_YourLastName.pdf

Points: 100

Weight in course grade: 7%

In the previous assignment you selected a research area with emphasis on software engineering or software, and gathered resources for a background essay. Now, you are required to write this essay in the form of a technical report (or thesis chapter).

It is recommended that you structure the report/chapter in several sections. You might want to have the first section (Section 1) "Overview" and the last section "Summary". In between, you are free to organize the chapter in several sections that would best serve your topic area and narration (descriptions/explanations/analyses).

It is expected that your essay will have at least 2,000 words (and longer is better). Recommended font types are Times New Roman or Calibri, font size 11, and line spacing 1.5 lines.

In the beginning, your essay should indicate what the topic (research area) is about, what motivated you to tackle it, why it is important, what are its most distinguishing characteristics, and who would benefit from substantial advancements within this area.

Then, provide a critical analysis of the most significant related research and development efforts; a summary of major research labs and/or other organizations focused on this topic area; an overview of major related tools and methods; examples of projects and applications; and a critical examination of all types of other "resources" pertaining to this area.

Include also a discussion of major directions/trends for research and development and your own views on how you expect this research area to evolve in the future. Furthermore, outline your own future work in connection with this topic.

Make sure that your essay also includes figures, diagrams and/or tables representative for the topic (include references in all cases).