Student _____

Department of Computer Science and Engineering

College of Engineering, University of Nevada, Reno

CS 791z Graduate Seminar on Software Engineering

Written Test

April 27, 2015

Test type: Closed-book exam

Number of questions: 7

Total points: 50

Weight in course grade: 20%

1 Describe the *reuse-oriented* software engineering process model. Also, indicate its advantages, disadvantages, and applicability. [8 points]

2 Describe the *Scrum* approach. Indicate what you think are its main advantages and disadvantages. [8 points]

3 Describe the *model for SE research* proposed by Mary Shaw [2002]. Give two examples for each of its three components. [8 points]

4 What do Beecham *et al* [2014] suggests to do in order *to make research accessible* and thus address the practice-research divide? [6 points]

5 Describe the *construction problem* identified by Otero and Peter [2015] in relation with big data analytics software engineering. [6 points]

6 Describe the *philosophy* behind the *SEMAT* initiative – see [Jacobson and Seidewitz, 2014]. [6 points]

7 Apply *Hegel's view* to describe <u>either</u> (a) your own evolving understanding of computer science (or software engineering) through the years; or (b) Boehm's views of software engineering evolution in the 1990s and 2000s (2 decades). [8 points]