

**Introduction to Computer Science Research**  
**Homework 2: Reading, Writing, and Understanding Research Papers**

**CS3950 Spring 2019**

*This homework is due at the beginning of class on January 25, 2019 and is worth 3% of your grade.*

Name: \_\_\_\_\_

CCIS Username: \_\_\_\_\_

<b>Problem</b>	<b>Possible</b>	<b>Score</b>
1	15	
2	20	
3	15	
Total	50	

**1. Reading (and writing) research papers.** The following questions ask you to compare and contrast the three steps of the reading process presented by Fong and Keshav.

**1a.** Start by describing each of the three steps in Fong and Keshav using own words. (5 pts)

**1b.** How are these two approaches similar? Put another way, what aspects of reading papers are shared by both approaches (but maybe using different names)? (5 pts)

**1c.** How are the approaches different? Note that you should not focus on differences outside of the reading steps (*e.g.*, the reviewing process) (5 pts)

2. **RAID.** The following questions pertain to Patterson *et al.*'s RAID paper. You should recognize them, they are lifted directly from Fong's paper.

2a. What is the research problem the paper attempts to address? (5 pts)

2b. What are the claimed contributions of the paper? (5 pts)

2c. How do the authors substantiate their claims? (5 pts)

2d. What are the conclusions? (5 pts)

**3. Writing papers.** Michael Ernst's lesson on how to write a paper offers important advice. Evaluate the RAID paper using several of Ernst's criteria listed below.

**3a.** Do the authors identify a problem that is **interesting**, **hard**, and that is **solved** by their work? Was it **novel**? Give an example/counterexample for each. (5 pts)

**3b.** Do the authors explain both *what* and *why*? If yes, give an example. (5 pts)

**3c.** Does the paper ever "lead the reader down the garden path"? If yes, give an example. (5 pts)