

COM S 413/513: Homework 5 [Reading]

AFL++: Combining Incremental Steps of Fuzzing Research

September 21, 2023

Learning Objectives:

In this homework, students will

1. learn and understand terminologies related to fuzzing
2. learn technical reading and writing

Instructions:

1. Total points: 17 pt
2. Early Deadline: Sep 27 (Wed) 11:59PM
3. Deadline: Sep 29 (Fri) 11:59PM
4. How to submit: Create a single PDF with answers and upload it to Canvas.

Question:

Read the paper and answer the following questions based on the paper.

1. (2 pt) What is fuzzing? (Word limit ≤ 75 words)
2. (6 pt) Name three technical challenges we face when developing or applying fuzzing? (Word limit ≤ 250 words)
3. (6 pt) For each challenge mentioned above, describe briefly the novel solutions developed in the paper. (Word limit ≤ 500 words)
4. (3 pt) How fuzzing can be further improved? Document your thoughts.