Software Engineering
CSE435
Fall 2023

Homework 3
Due: September 27, 2023

This assignment focuses on software challenges of today and the future.

Read the article by Fred Brooks (“No Silver Bullet”) and consider the cases that were discussed in HW1, HW2, and lectures to address the following points in a 1-page essay.

Summary of Brooks article:

- Concisely define what Brooks meant by a “silver bullet” in your own words.
- Describe 3 examples of currently-used technology that are considered “silver bullets,” using the definition by Brooks. Provide an analysis as to why each of the respective examples should be considered a “silver bullet.” What problems are they respectively attempting to address?
- Summarize and contrast his meanings for the essence and the accidental difficulties of (software) technology; use examples from above to support your discussion.

Describe challenges posed by future autonomous, safety-critical systems

- Describe essential difficulties posed by these systems; explain and include concrete examples from the transportation and/or the medical sectors.
- Describe and discuss the potential accidental difficulties posed by these systems; how can these accidental difficulties be mitigated?