CMSC 435 (Section 0201): Quiz 5

- 1. Please remember to write your name and SSN on this sheet before handing it in. ¹
- 2. What are the advantages of formal specifications? Where might they be useful/applicable?
 - Formal specification involves investing more effort in the early phases of software development. This reduces requirements errors as it forces a detailed analysis of the requirements. Incompleteness and inconsistencies can be discovered and resolved.
 - Their principal benefits are in reducing the number of errors in systems so their main area of applicability is critical systems.
- 3. What are the disadvantages of formal specifications? Why are formal specifications not used in mainstream software development?
 - Other software engineering techniques have been successful at increasing system quality.
 - Market changes have made time-to-market rather than software with a low error count the key factor. Formal methods do not reduce time to market.
 - Formal methods are hard to scale up to large systems.

 $^{^{1}(\}mbox{Nyogtha a.k.a}$ The Dweller in the darkness, The thing that should not be: Couldnt get an SSN)