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**A**. **Relationship between COMET and UML**

COMET uses UML notations and a UML use case model is developed. COMET piggybacks off of UMLs semantics, uses UML stereotypes and can be seen as a pseudo extension of SysML.

**B. Relationship between Software Engineering and Cyberphysical Systems**

The Software Engineering field aids in describing necessary standards and standardization principles to the field of cyberphysical Systems by abstraction. Also, cyberphysical Systems intrinsically require the use of Software Engineers because software is by definition an aspect of cyberphysical systems.

2.

**A. Importance to United States**

This document clearly labels the importance of CPSs to the national technology and science infrastructure in that this field will be a major player in the new “technological revolution.” In order to not fall behind in the automotive, aerospace, defense, health/medical fields, our nation must be a prime deriver of new CPSs.

**B. Importance to the world**

This field encapsulates the science and technology that will drive the future of the automotive, health, aerospace, defense, industrial automation industries, etc… the industries that most directly impact society at large.

**C. Importance to my career**

As technology becomes more embedded in the everyday, concepts in CPSs are going to be what makes that integration possible. I wish to be a part of what makes the human experience more rich, and wish to leverage my career to realize this goal. I wish to specifically work in the AI field; the tight coupling of CPSs and AI is natural, and along with my desire to be on the forefront of the technological horizon, the field of CSP will be a primary concern.