## Proof that shows Computer Science is a pseudoscience.

## What Is Science? What is Scientific? & What is Unscientific?

The modern scientific method was created about 360 years ago during the Scientific Revolution and has been refined ever since. The scientific method is a proven method for acquiring and improving understanding of physical things in the real world and reality through objective observations and experimentation or empirical evidence.

Science specifically excludes authoritarian dictates or assertions. However, the theoretical knowledge in computer science, which provides the essential theoretical foundation to conduct applied research in CBSE, has many such flawed dictates or assertions, such as descriptions, understandings, concepts, or definitions about so-called software components and CBE for software. How is this kind of baseless or untested authoritarian dictate or assertion about components scientific, particularly if each contradicts verifiable evidence and observations about components?

What were the observations being made about real components, CBPs, and CBE? What were the hypotheses being made about components, CBPs, and CBE based on the observations? How was each of the hypotheses tested and validated to create theories?

How is each theory or description falsifiable if it is flawed (e.g., when new evidence that contradicts the theory or description is discovered)? Each theory or description must be consistent with all known observations and evidence. How would you rectify or refine each theory to improve it if it is imperfect? Which of the proven scientific principles and methodologies does computer science adhere to, since it should adhere to all of them?

The elementary rule for valid scientific knowledge is that every piece of knowledge (e.g., a description, concept, or theory) about a physical reality must be consistent with all the known or available observations or evidence about the physical reality. Finding an observation or evidence that contradicts any piece of scientific knowledge falsifies it.

What is an objective truth about reality or real things (e.g. real components/CBE)? Objective truth is something that is true regardless of whether anyone believes in it. The methods, principles, and tools of the scientific method are uniquely conceived, refined, and perfected to seek out, test, and validate in order to establish truths/facts objectively.

## It is a no-brainer to replace voodoo science in the foundation.

If the theoretical foundation of any applied research comprises voodoo scientific knowledge (comprising myths or misconceptions), it is a no-brainer to replace it with valid scientific knowledge. I have been advocating the creation of valid basic or pure science "Componentology", which is the right and vital foundation for conducting applied research in CBSE (Component-based Software Engineering). The applied research in CBSE can never be successful without creating and relying on pure science Componentology.

Only fake or ignorant scientists tolerate conducting any applied research, such as the applied research in CBSE (Layer#2 in the figure below), by relying on voodoo science such as about so-called components and CBE (Component-based Engineering), which is widely prevalent today. It is a no-brainer for even fake scientists that: If the theoretical foundation for any applied research comprises voodoo scientific knowledge (comprising of myths and illusions), which must be replaced at any cost by valid pure science.

Fake scientists who are ignorant of these two aspects are unfit to evaluate my research and discoveries (1) the relationship and differences between pure science and applied research (see Figure below), and the vital role of pure science in applied research, and (2) the essential and observable difference between physical components (or CBE) and other kinds of parts (or engineering paradigms that are not component-based).

Please investigate all the evidence and observations that include core-fact-1 & core-fact-2, and answers to core-question-1 & core-question-2, which provide proof that the existing knowledge about so-called software components and CBE is voodoo science.

## Two vital parts (or layers) of the research ecosystem: (1) Basic Research/Science & (2) Applied Research

Applied Research Layer#2: Applied Research for CBSE (Component-based Software Engineering) is conducted to invent tools, methods, & technologies to create real software components; & to use the components to build software products by inventing more tools, methods, and mechanisms of CBE (Component-based Engineering), by relying on the prevalent or available good or bad theoretical foundation comprising theories, concepts, axioms, or beliefs in basic science layer#1 below.

Theoretical Foundation (or basic science) Layer#1: Theoretical Foundation or basic scientific knowledge for CBSE comprises theories, concepts, evidence, axioms, beliefs, and definitions or descriptions to understand (i) essential properties of components, (ii) anatomy, construction, and structure of CBPs (Component-based Products); & (iii) methods and mechanisms of CBE (Component-based Engineering).

- → It is impossible to even begin constructing a house in thin air, without having a good or bad foundation for it. Similarly, it is impossible to even begin applied research (in layer#2) for CBSE in thin air without having any good or bad concepts, axioms, beliefs, or descriptions (e.g., of basic building blocks such as components and methods or concepts of using components for CBE) in the theoretical foundation in layer#1.
- → It is impossible for any applied research in layer#2 to successfully address any unsolved technological problem (e.g., real CBSE), if the basic science in layer#1 is voodoo science comprising flawed theories, concepts, methods, or descriptions, for example, about basic building blocks such as components and methods or concepts of using components of CBE.