**Abstraction in Algorithms & SCI**

**Algorithm’s main point:**

"We can solve any problem by introducing an extra level of indirection (abstraction)." (David Wheeler; British Computer Scientist)

In most of the algorithms we analyzed, a high-level design was initially introduced to address the problem, followed by examining the specifics involved in implementing it.

**SCI main point:**

Through the Transcendental Meditation technique, one attains a state of abstract pure intelligence. By operating from this elevated level, all problems can be effectively resolved, leading to limitless achievements and profound fulfillment.

**The connection between Algorithms and SCI:**

The concept of abstraction was extensively employed throughout the course. Primarily, within the algorithms covered, we introduced the solutions in an implementation-agnostic manner. An illustration of this is seen in the case of sorting using a priority queue. Initially, the general abstract algorithm entailed inserting all items into the queue and removing them individually. Following this, we delved into the implementation details, such as selecting the type of priority queue (heap-based or sequence-based) and defining the specific procedures for insertion and removal operations.

Another facet of abstraction that we utilized pertains to Abstract Data Types (ADTs), which serve as the abstraction for each data structure we defined. Additionally, abstraction played a crucial role in exam review, studying for exams, and retaining essential information post-course completion. While we delved into numerous details throughout the course, the paramount objective was to develop a comprehensive understanding of the core concepts and key information relevant to professional settings and interviews. For instance, it is unnecessary to memorize the intricate implementations or intricate specifics of every data structure; instead, it suffices to possess a holistic mental image of their overall structure. With this conceptual framework, it becomes effortless to recall where and when to utilize a particular data structure and the associated time complexities of its operations. This approach extends to sorting algorithms, graphs, and other related topics as well.

Through the practice of Transcendental Meditation (TM), individuals can access the fundamental origin of thought: an infinite state of pure abstract awareness and intelligence that is available to all individuals worldwide. All thoughts stem from this source, indicating that all the problems in the world have their roots there as well. To effectively address these issues, it is essential to operate and act from this elevated level of consciousness.

The abstraction theorem holds a significant position in computer science, serving as a fundamental theorem applicable not only to algorithms but across various domains within the field. For instance, in system design, we often communicate in terms of design patterns and high-level concepts without delving into the precise details of code implementation. By leveraging the power of abstraction provided by the theorem, we are empowered to effectively address and solve problems encountered in computer science. Similarly, in the context of the Science of Consciousness Intelligence (SCI), the practice of Transcendental Meditation (TM) facilitates the attainment of abstract intelligence. By aligning our actions with this elevated level of consciousness, we can experience heightened fulfillment and enriched lives.