Topics: An introduction to computer science; course information
Announcements: See the Newell and Simon handout for the reading assignments for the next three lectures.

Two quotations about computer science.

1. The computer revolution is a revolution in the way we think and in the way we express what we think.

2. Computer science is the study of the phenomena surrounding computers.

1. (previous sentence) Underlying our approach to this subject is our conviction that “computer science” is not a science and that its significance has little to do with computers.

2. (cont.) The founders of this society understood this very well when they called themselves the Association for Computing Machinery. The machine – not just the hardware, but the programmed living machine – is the organism we study. (Newell and Simon, “Computer Science as Empirical Enquiry: Symbols and Search”, tenth Turing Award lecture, 1976.)

1. (cont.) The essence of this change is the emergence of what might best be called *procedural epistemology* – the study of the structure of knowledge from an imperative view, as opposed to the more declarative point of view taken by classical mathematical subjects. (Abelson and Sussman, *Structure and Interpretation of Computer Programs*, MIT Press, 1985.)

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1According to the Merriam-Webster’s Dictionary, “empirical” means, “originating in or based on observation or experience; relying on experience or observation alone often without due regard for system and theory; capable of being verified or disproved by observation or experiment”.