CS050
Information and Computation: History and Ethics
Fall 2008
Reading List Addendum

Required texts:

We will use the preface and first chapter to set the context and motivate the project of seeking a value judgement regarding an information technology. We will then use Chapter 2 as an introduction to philosophical ethics. This will be supplemented with other readings. In the context of the copyright problem, we will use Chapter 6. We may also use Chapters 4 and 8 in general discussion of social impacts of technology.

Ifrah, Georges. *The Universal History of Computing: From the Abacus to the Quantum Computer*
This text provides a historical context for information technologies. We will read Part One to get the general context, Part Three and Chapter 6 from Part Two to get an overview of information and computer science as a discipline, and half of Part Two to provide context to our treatment of copyright starting with the English Stationers' Company.

Patterson, Lyman. *Copyright in Historical Perspective.*
This book provides a detailed history of copyright. We will cover this in its entirety during our consideration of copyright and copyright policy.

Miscellaneous other handouts or online sources including but not limited to:

Hamming, Richard. *Information and Coding Theory.*
We will cover Shannon's first theorem, mutual and conditional mutual information from this text (Chapters 6-8).

We will draw on Part I, Information, and Chapters 4 and 5 from Part II, Knowledge and Perception.

Recommended reading from Chapter 1, Philosophy and the digital environment, and Chapter 2, The digital workshop.

Drawing on excerpts on Ethics (Aristotle, Kant, Mill), Epistemology (Hume, Kant, Russell) and perhaps the Mind-Body problem (Descartes, Hume).