

Source evaluation/tracker

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March 9, 2018

Source	Source content	Source evaluation
Error detecting and error correcting codes [Hamming, 1950]	This is a paper by R. W. Hamming, who contributed much to modern error-correcting codes. One of the main encoding types used in my project is even named the Hamming code. It has formed much of the basis of modern communication theory and can certainly be trusted.	
A mathematical theory of communication [Shannon, 1948]	This paper, together with [Hamming, 1950] are generally considered to be the seminal works on coding theory. This lays much of the groundwork for communication theory and gives a more general definition of the Hamming Code.	
Generalized dna barcode design based on hamming codes [Bystrykh, 2012]	This article is very much relevant to what my project is about. It doesn't seem to be very clear though, and it uses a seemingly inoptimal form of parity. However it provides helpful insight into what actual researchers in the field are doing and have done with these ideas.	
Introduction to coding theory [Guruswami, 2010]	This is not a very good academic source but gives a good informal overview of coding theory.	

Polynomial codes: an optimal design for high-dimensional coded matrix multiplication [Yu, Maddah-Ali and Avestimehr, 2017]	This source is very technically detailed, which isn't necessarily a bad thing but makes it pretty dense. Potentially very useful for a complicated understanding of polynomial codes, although I'm not sure if I'll use polynomial codes.
Families of hadamard codes [del Río and Rifà, 2012]	This source turned out not to be very useful as it only relates to a highly specific class of Hadamard code. Other simpler tutorials on the internet are much more useful.
Hadamard matrices and their applications [Hedayat and Wallis, 1978]	This is a far more appropriate paper that gives a more general overview of what a hadamard matrix is and can be used for. Very useful overall.
The search for hadamard matrices [Golomb and Baumert, 1963]	This paper gives a very good overview of Hadamard's original construction of the $2^n \times 2^n$ matrices.
Hadamard matrices and their designs: A coding-theoretic approach [Assmus and Key, 1992]	This paper gives a number of very mathematically involved constructions of Hadamard matrices. I didn't end up using any of these but it provided a useful further background around Hadamard constructions.
Hadamard designs [Spence, 1972]	This paper is about Hadamard designs for alphabet sizes of n where $n \neq 2$. This is potentially very useful information as I am concerned with DNA barcodes, ie $n = 4$.
Lifted polynomials over F_{16} and their applications to dna codes [Oztas and Siap, 2013]	
Codes, not ciphers [Baylis, 2010]	
Error correcting codes: Practical origins and mathematical implications [Pless, 1978]	

Boole and the algebra of logic [Kneale, 1956] This isn't a very mathematically advanced source but my project doesn't need to be very highly complex in this area. This is used for a quick citation on how I can adapt Hadamard generation with additive negation to the Boolean (algebra) system used by computers.

The degeneracy of the genetic code and hadamard matrices. [Petoukhov, 2008]

Construction of multilevel hadamard matrices with small alphabet [Trinh and Fan, 2008]

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