

EE 232E Project 2

Social Network Mining

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1 A brief tutorial on how to use this template

Please remove the tutorial section in the final manuscript by commenting, i.e. *%(something)*

1.1 Figures

Figure insertion is shown in Fig 1.

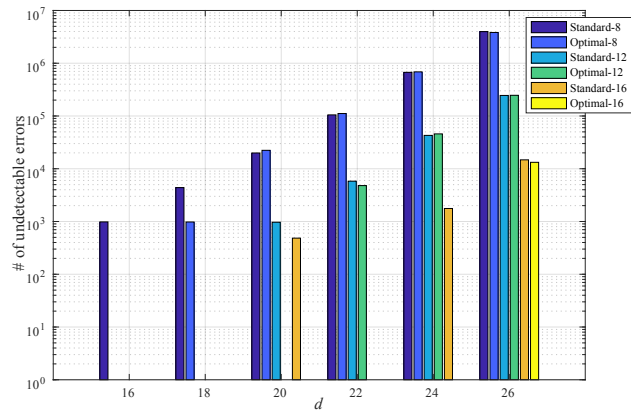


Figure 1: An example of figure insertion

1.2 Equations

An example of equations is given as follows.

Theorem 1. *Let a, b, c denote the sides of a triangle, respectively. If $a \perp b$, the pythagoras theorem is given as follows.*

$$c^2 = a^2 + b^2 \quad (1)$$

1.3 Tables

An example of tables is shown in Table 1.

Table 1: Standard CRC Codes versus Optimal CRC Codes for Convolutional Code
 $G = (561 \ 753)$ with $n = 504$ Bits

Name	Gen. Poly.	Undetected Error Distance Spectrum						
		d	16	18	20	22	24	26
Standard-8	0x19B	983	4387	19909	105000	672724	3972970	
Optimal-8	0x19D	0	979	22349	111304	686314	3830340	
Standard-12	0x180F	0	0	969	5815	42893	245211	
Optimal-12	0x108B	0	0	0	4793	45795	246729	
Standard-16	0x11021	0	0	484	0	1765	14752	
Optimal-16	0x1F8FD	0	0	0	0	0	13240	

2 Facebook network

2.1 Structural properties of the facebook network

2.2 Personalized network

2.3 Core node's personalized network

2.3.1 Community structure of core node's personalized network

2.3.2 Community structure with the core node removed

2.3.3 Characteristic of nodes in the personalized network

2.4 Friend recommendation in personalized networks

2.4.1 Neighborhood based measure

2.4.2 Friend recommendation using neighborhood based measures

2.4.3 Creating the list of users

2.4.4 Average accuracy of friend recommendation algorithm

3 Google+ Network

3.1 Community structure of personal networks