

Project Report

author

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1 Workload

Function	Workload	Contributor
Source	Text string (TXT)	Chenye
	Image (PNG)	Chenye
	Audio (WAV)	Chenye
Encoder	(7, 4) Hamming	Chenye
	CRC	name
Channel	BSC	Chenye
Error Corrector	(7, 4) Hamming with Syndrome Lookup Table	Chenye
	CRC	name
Decoder	(7, 4) Hamming	Chenye
	CRC	name
Destination	Text string (TXT)	Chenye
	Image (PNG)	Chenye
	Audio (WAV)	Chenye

2 Results

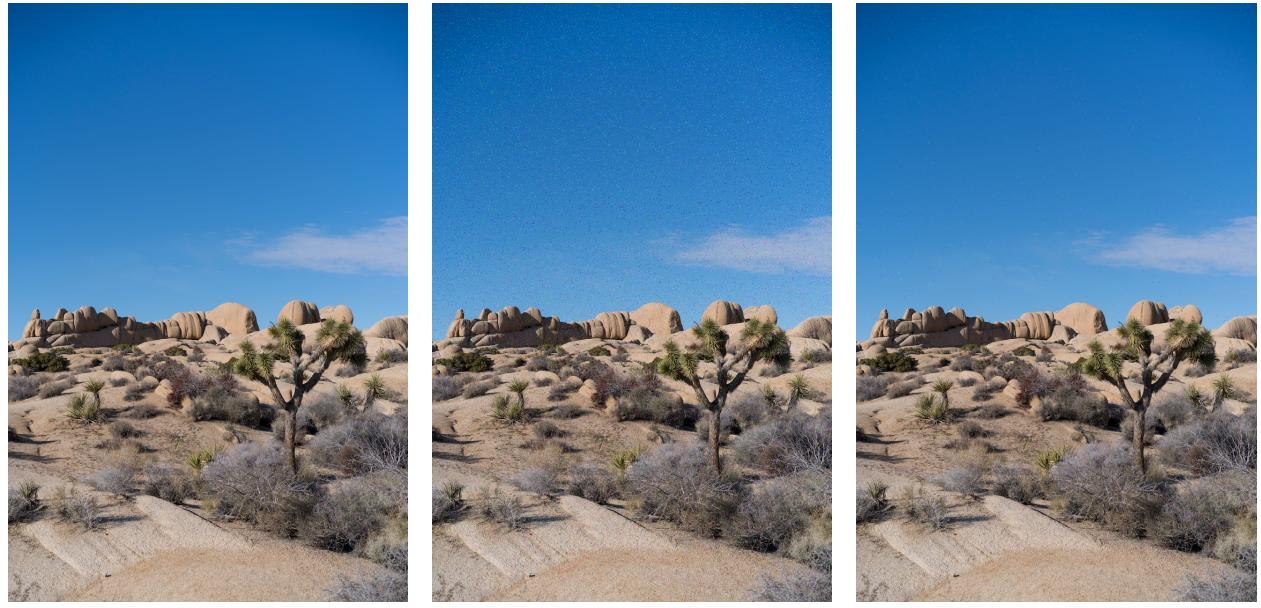
2.1 (7,4) Hamming Code

2.1.1 Text string

Original	Without correction	Corrected
Hello World! EEC269A Error Correcting Code Demo	Hello World! EEC269A Drror Correcting(CoDe(Dmmo	Hello World! EEC269A Error Correcting Code Demo

2.1.2 Image

2.1.3 Audio

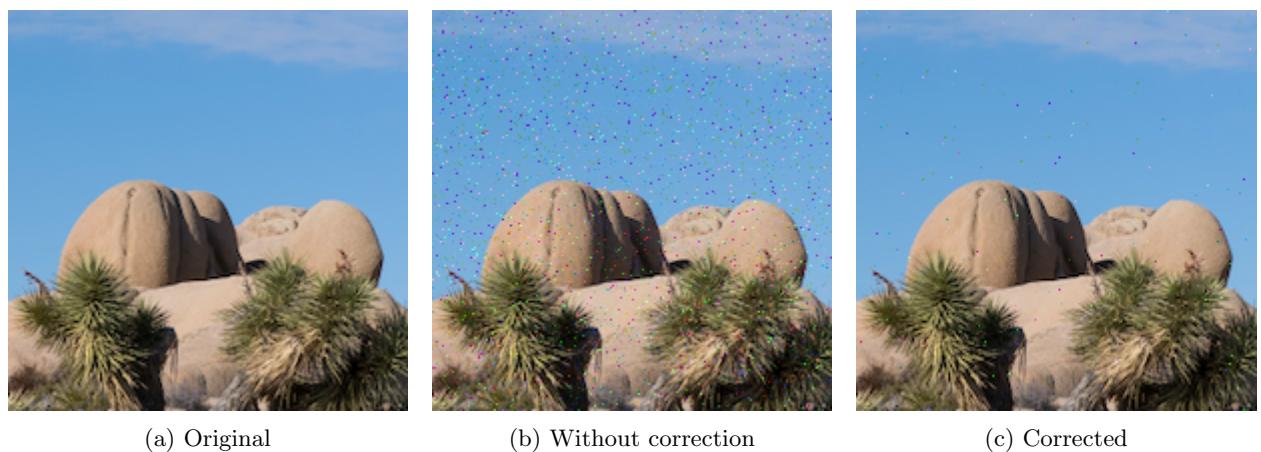


(a) Original

(b) Without correction

(c) Corrected

Figure 1: Image encoded with Hamming passed through BSC (entire)



(a) Original

(b) Without correction

(c) Corrected

Figure 2: Image encoded with Hamming passed through BSC (details)

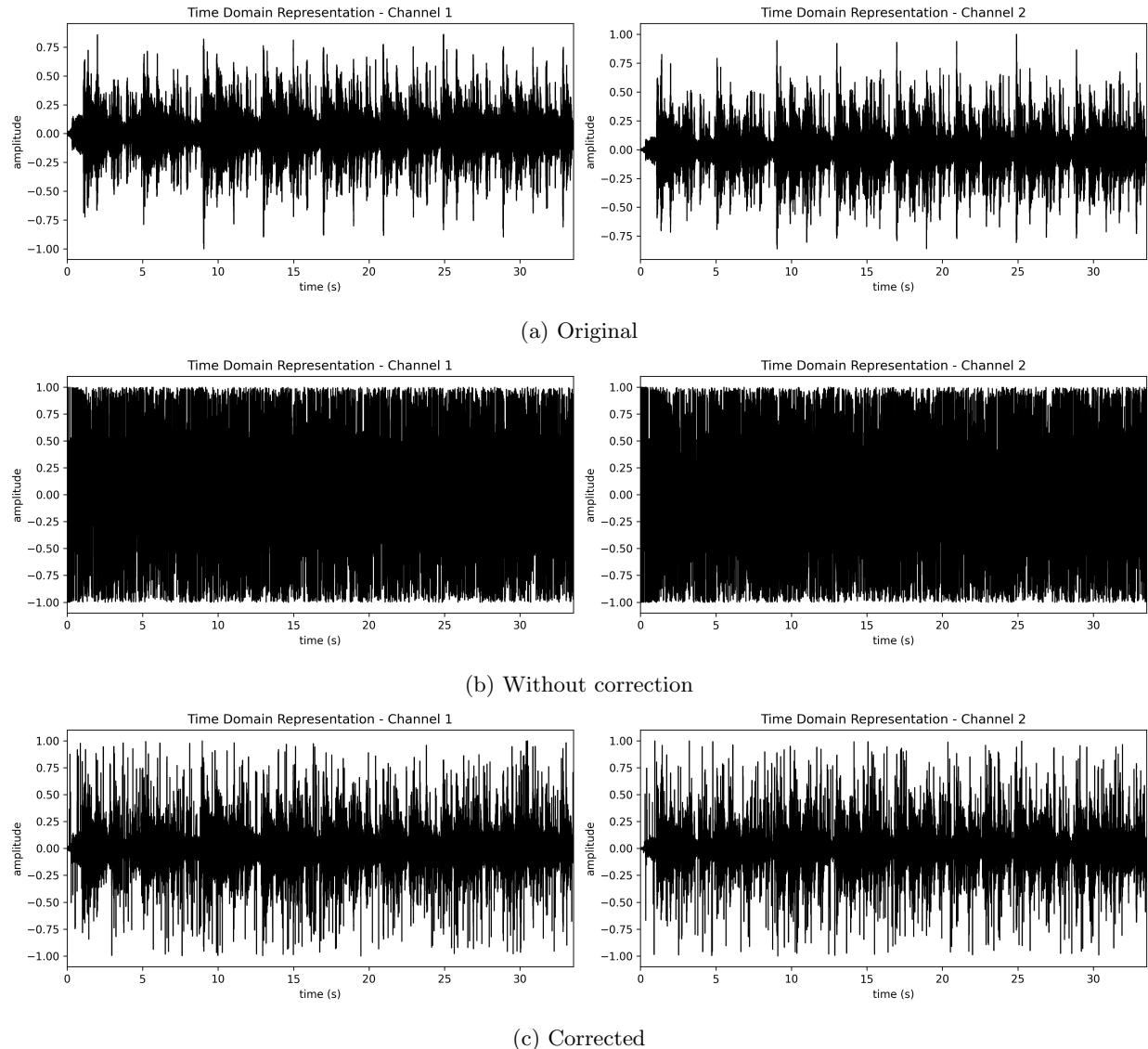


Figure 3: Audio encoded with Hamming passed through BSC

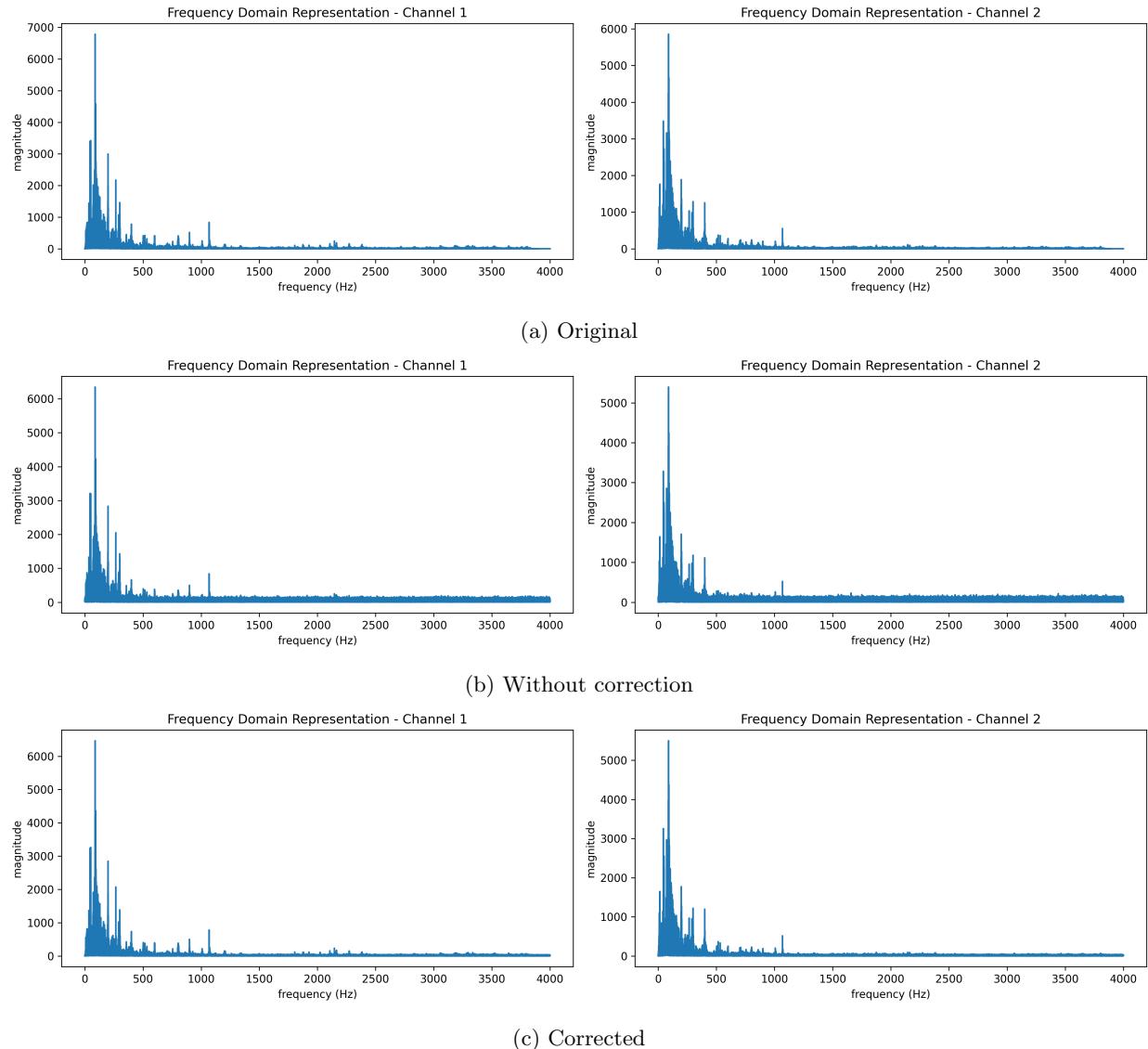


Figure 4: Audio encoded with Hamming passed through BSC