ENEL 671 Adpative Signal Processing Project Report

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Abstract—The abstract goes here.

Index Terms—IEEE, IEEEtran, journal, LaTeX, paper, template.

I. Introduction

ADAPTIVE filtering is used for a variety of applications. One such use case is for adaptive equalization. That is to remove unwanted signals from the channel output which can be caused by multipath or other distortions

II. Equalization Methodology

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ADAPTIVE filtering is used for a variety of applications. One

III. Pre Experiment Calculations

IV. Project 1: Least Mean Squares Algorithm

A. Subsection Heading Here

Subsection text here.

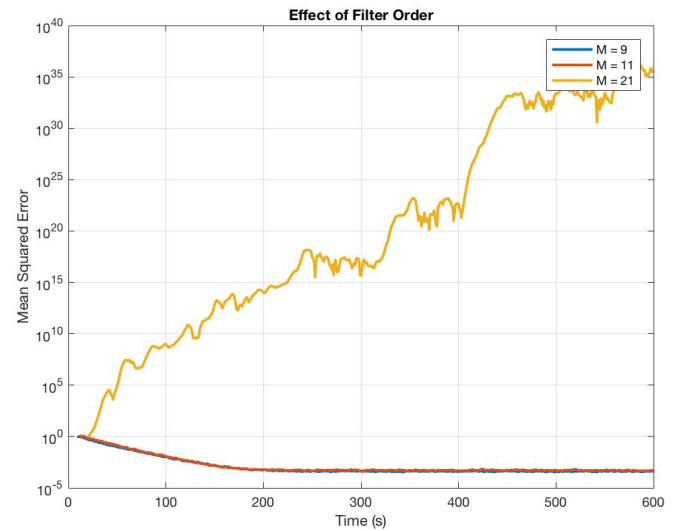### B. Subsection Heading Here

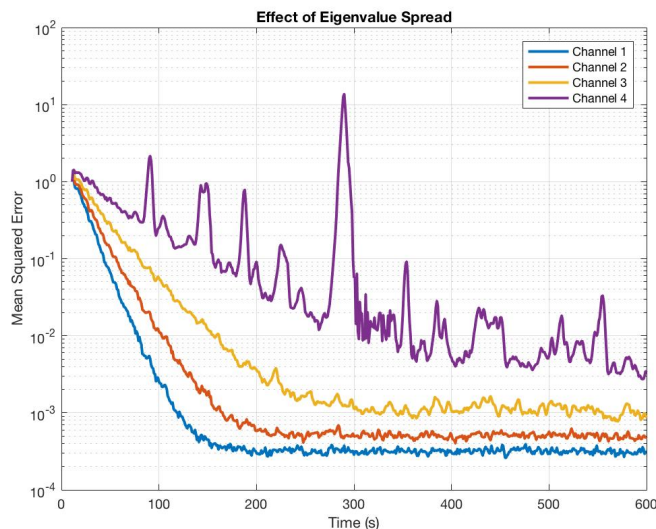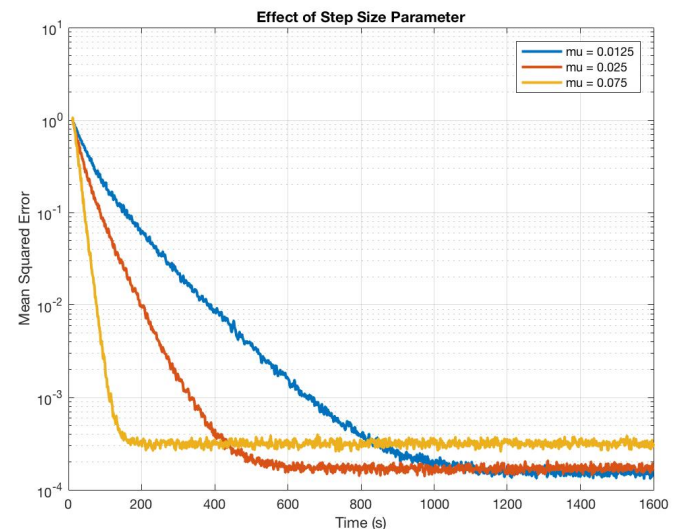Subsection text here.

Fig. 3: BLAH BLAH

C. Subsection Heading Here

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Fig. 2: BLAH BLAH

Fig. 4: BLAH BLAH

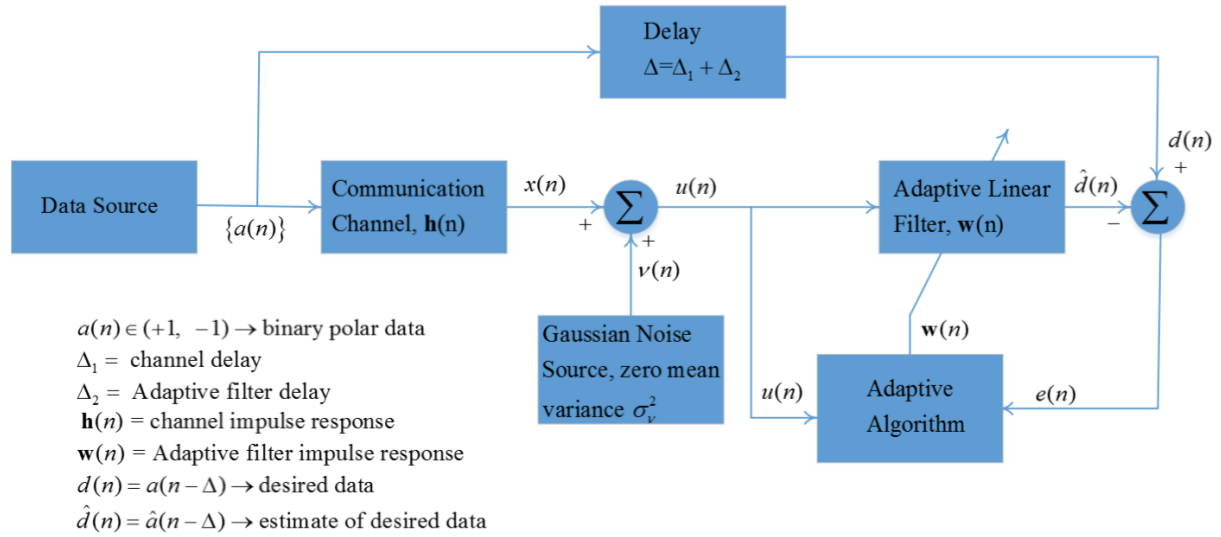$a(n) \in (+1, \; -1) \rightarrow$ binary polar data
$\Delta_1 =$ channel delay
$\Delta_2 =$ Adaptive filter delay
$\mathbf{h}(n) =$ channel impulse response
$\mathbf{w}(n) =$ Adaptive filter impulse response
$d(n) = a(n - \Delta) \rightarrow$ desired data
$\hat{d}(n) = \hat{a}(n - \Delta) \rightarrow$ estimate of desired data

Fig. 1: BLAH BLAH

D. Subsection Heading Here

Subsection text here.

Fig. 5: BLAH BLAH

E. Subsection Heading Here

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V. CONCLUSION

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APPENDIX A
PROOF OF THE FIRST ZONKLAR EQUATION

Appendix one text here.

APPENDIX B

Appendix two text here.

ACKNOWLEDGMENT

The authors would like to thank...

REFERENCES

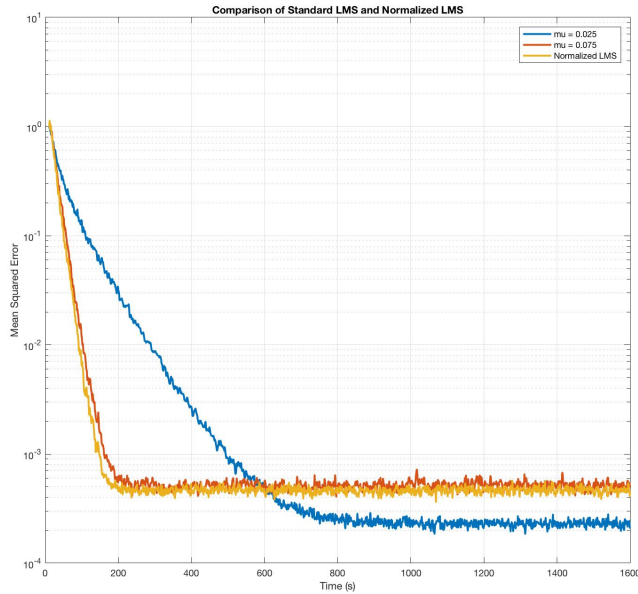[1] H. Kopka and P. W. Daly, *A Guide to LaTeX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.

Michael Shell Biography text here.

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John Doe Biography text here.

Jane Doe Biography text here.