

# **Northeastern University**

Department of Electrical and Computer  
Engineering

**EECE2323: Digital Systems Design Lab**

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**Lab # 6 - 8: Adding Register File to ALU, Adding  
Data Memory to the Datapath**

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Lab Location: 9 Hayden Hall, Northeastern University,  
Boston, MA 02115

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# 1 Introduction

## 2 Design Approach

## **3 Results and Analysis**

### **3.1 Design Simulation**

### **3.2 Hardware Testing**

## 4 Conclusions

# Appendices