DEVELOPMENT AND USER TESTING OF NEW USER INTERFACES FOR MATHEMATICS AND PROGRAMMING TOOLS, FOCUSING ON THE COQ PROOF

by

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INTRODUCTION

COQ AND THE NEED FOR IMPROVED USER INTERFACES

COQEDIT, PROOF PREVIEWS, AND PROOF TRANSITIONS

- 3.1 Software Description
- 3.2 Experiment Design, Results, Analysis, and Conclusions

KEYBOARD-CARD MENUS + SYNTAX TREE HIGHLIGHTING, APPLIED TO FITCH-STYLE NATURAL DEDUCTION PROOFS

4.1 Keyboard-Card Menus

4.1.1 Motivation

4.1.2 Software Description

4.1.3 Experiment Design, Results, Analysis, and Conclusions

4.2 Syntax Tree Highlighting

4.2.1 Understanding Syntactic Structure

4.2.2 Structure Editing

4.3 Combined System Description

$\mathbf{CHAPTER}\ \mathbf{5}$

RELATED WORK

CHAPTER 6 SUMMARY AND CONCLUSIONS

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