

DEDICATION

This thesis is wholeheartedly dedicated to my beloved family, whose unwavering support, encouragement, and love have been my greatest source of strength throughout this journey. Your patience, understanding, and belief in me have made this achievement possible.

I also dedicate this work to the ever-evolving world of Computer Science research, where curiosity meets innovation. May this humble contribution serve as a small step toward greater discoveries and inspire future scholars to push the boundaries of knowledge.