

## ACKNOWLEDGEMENT

---

At this moment of accomplishment, first of all, I pay my obligations to my guide **Dr. Piyush P. Gohil** (Associate Professor, Mechanical Engineering Department) for his immense support and for believing in me more than myself that I could pursue my Ph.D. in the field of Biomechanical Engineering. His consistent direction, intellectual insight, and encouragement throughout my research effort allowed me to accomplish my work on time. He not only assisted me in grasping the fundamental principles and practices of the work, but he also motivated me at every turn to improve my way of thinking and approach. His conversations and recommendations contributed to a better implementation of the task. This dissertation would not have been feasible without his unwavering support.

I am also thankful to Dr. Veerendra K. Shandilya (Ph.D., LPO, BOCPO) for his guidance and constant encouragement throughout this work. I express my special thanks to Dr. Khyati Vansadavala (Prosthetist & Orthotist, RCI No: A51452) for allowing me to carry forward my gait analysis work in Evolution Healthcare Pvt. Ltd., Surat. I wish to thank Dr. Sagar Naik (CEO & Chief Physiotherapist, Asian Physiotherapy & Research Institute, Surat) for his suggestions, guidance, and sharing of experiences. The researcher expresses sincere thanks and gratitude to the participants for their patience and cooperation during the study's completion.

I would like to express my sincere gratitude to the members of the doctoral advisory committee who have corrected me when necessary as well as to all of the faculty in the department of mechanical engineering in particular for their willingness to share their knowledge.

I am also hugely appreciative to the Dean of the Faculty of Technology and Engineering for his kind support extended throughout the study.

Additionally, I want to convey my sincere gratitude to my friends, coworkers, and last but not least, my family, who have provided their explicit and tacit support for my dissertation effort.

**Piyush T. Patel** 