

# **WRITTEN WORK**

**NOTE:** All links lead to either my personal website or my Github and are safe to use.

## **1). Master Thesis Abstract**

Abstract (along with Cover Page) of my master's thesis titled "Distributed Data Fusion and Control over a Network of Unmanned Aerial Vehicles". Ideally, I would share the entire copy of the thesis, but unfortunately it is NDA protected till 2028.

## **2). Co-author of Publication in ASME: Journal of Mechanisms and Robotics**

This publication, titled "Enhanced Euler-Lagrange Formulation for analyzing Human Gait with moving Base Reference" was the result of a part of the work done by me when I was contracted by DRDO (Defense Research and Development Organization) at Thapar Institute of Engineering and Technology. The work done here deals with adapting a dynamics algorithm, originally developed for fixed-base robotic manipulators, to model the dynamics of human gait.

## **3). Semi-Analytical Approach - Virtual Control System Design and Loads Verification for a multi-body model of a Bike**

This report was the result of a research project I was part of at the Institute of Mechanism Theory, Machine Dynamics and Robotics (IGMR) in RWTH Aachen. The work involved the development of a virtual stabilizing controller for a multi-body model of a mountain bike, which was being excited by loads measured by sensors on the actual bike. The aim of the project was to develop a simulation based workflow for enabling a more robust and efficient structural design of mountain bikes.

Additionally, I am attaching the link to my personal projects page, which contains almost all the projects I have been a part of in my career: [Projects Page](#)