# Summary of 300 Years of Optimal Control

#### Joshua Saunders

### January 2018

## Introduction

The study of optimal control began with a challenge by Johann Bernoulli. In simple terms, the challenge was to find the path from point A to point B, in a vertical plane, such that a moveable point M will take in the shortest amount of time if moved purely under the influence of its own weight (Sussmann and Willems 1997).

## References

Sussmann, Hector J, and Jan C Willems. 1997. "300 Years of Optimal Control: from the Brachystochrone to the Maximum Principle."  $IEEE\ Control\ Systems$  17 (3): 32–44.