



April 24, 2022

# MA 202 Project

## PREDICTING THE TRAJECTORY OF ROBOTIC ARM USING NUMERICAL METHODS

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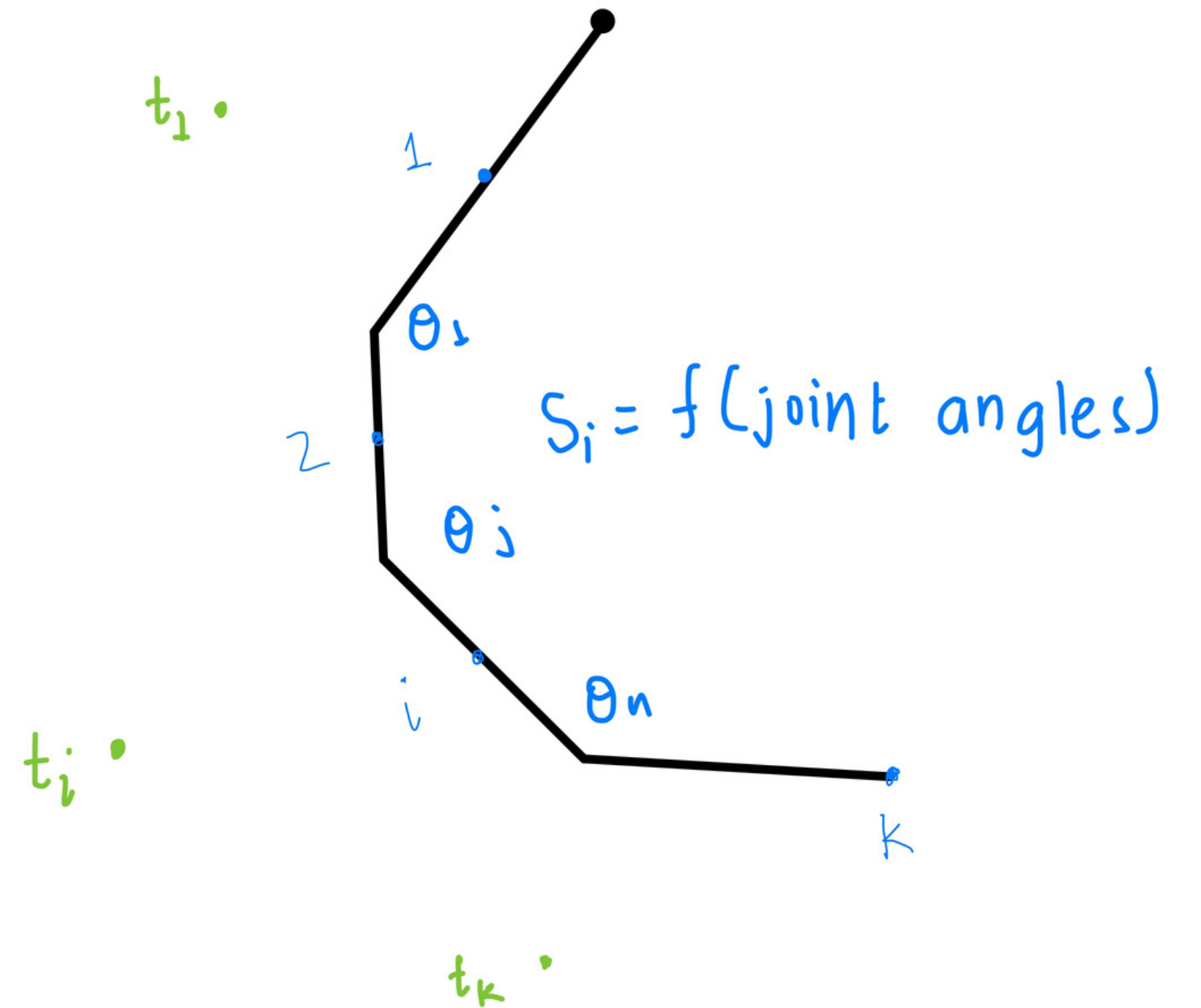
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# Problem



# Flow of the Presentation

- ◆ **Concepts behind the scenes**
- ◆ **MATLAB Demonstration**
- ◆ **Unity Demonstration**
- ◆ **Open to Questions**

# The crux of Jacobian Transpose Method

$$e_i, \alpha, J, J^T, \theta_i$$

$$\Delta\theta = \alpha J^T e_i$$

$$\theta_{i+1} = \theta_i + \Delta\theta$$

$$s_{i+1} = f(\theta_{i+1})$$

$$e_{i+1} = t - s_{i+1}$$

# Fabrik Algorithm

