

Moving-Train

Inputs: Train Parameters

Outputs: Graph of Position & Velocity

Calls: train_motion()
RK4()

RK4

Inputs: Odes, timespan,
Initial Values

Outputs: Position/Velocity Data

Calls: Odes

Train_Motion

Inputs: time, position,
velocity

Outputs: velocity, acceleration

Calls: NA

Functions

Operation

Function

Initialize
Parameters

Moving-Train

Create Odes
with train Params

Moving-Train →
Train_Motion

Approximate
Position/Velocity from
ODEs

Moving-Train →
RK4

Graph Position
and Velocity

Moving-Train

PseudoCode