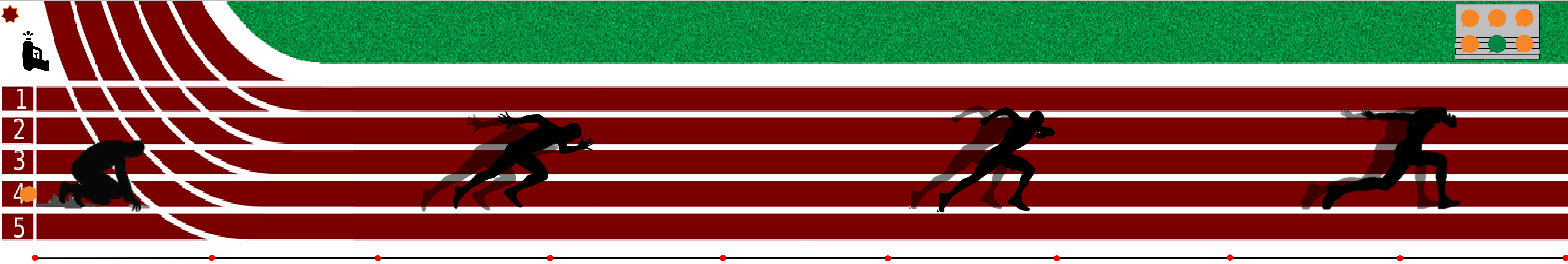


Dylan Cedenno, Marc Griffiths, Jordan Noyes, Handy A Pierre, Edwin Ulysse



Objective:

The objective of this project is to objectively measure and predict a sprinter's performance.

Background:

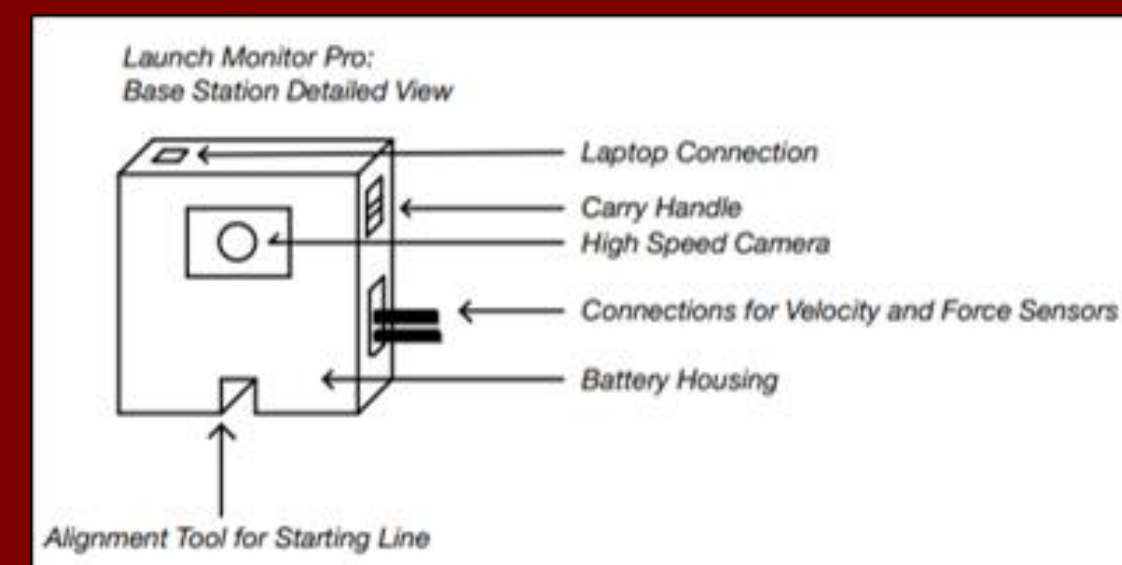
● Primary Market - Collegiate Track Teams

● Secondary Markets –

- ✦ Fans/parents
- ✦ Professional running teams
- ✦ Other sports
- ✦ High school track teams
- ✦ Master Sprinters

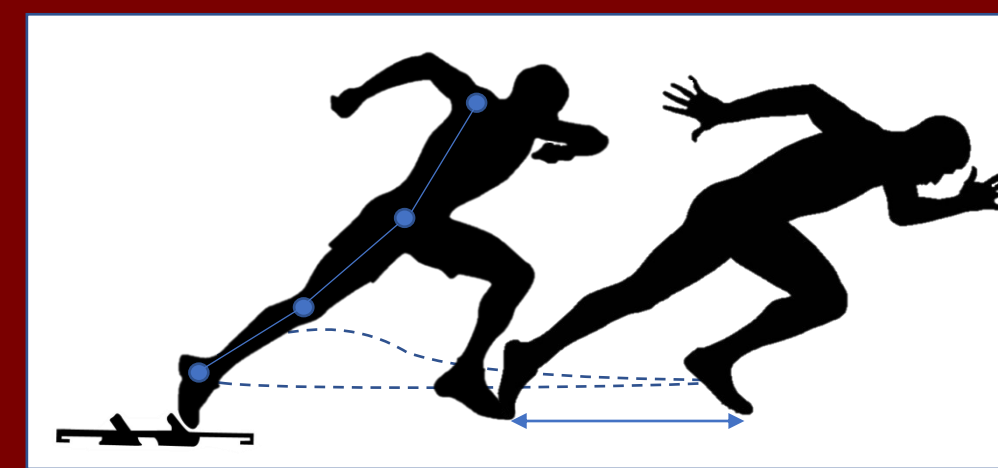
Experimental Design:

Base Station



- ✦ Housing built in 3D printed material
- ✦ High-speed camera inside housing
- ✦ USB port in housing for laptop connection
- ✦ Battery to supply power to technology
- ✦ On board processor within housing

Start Measurements

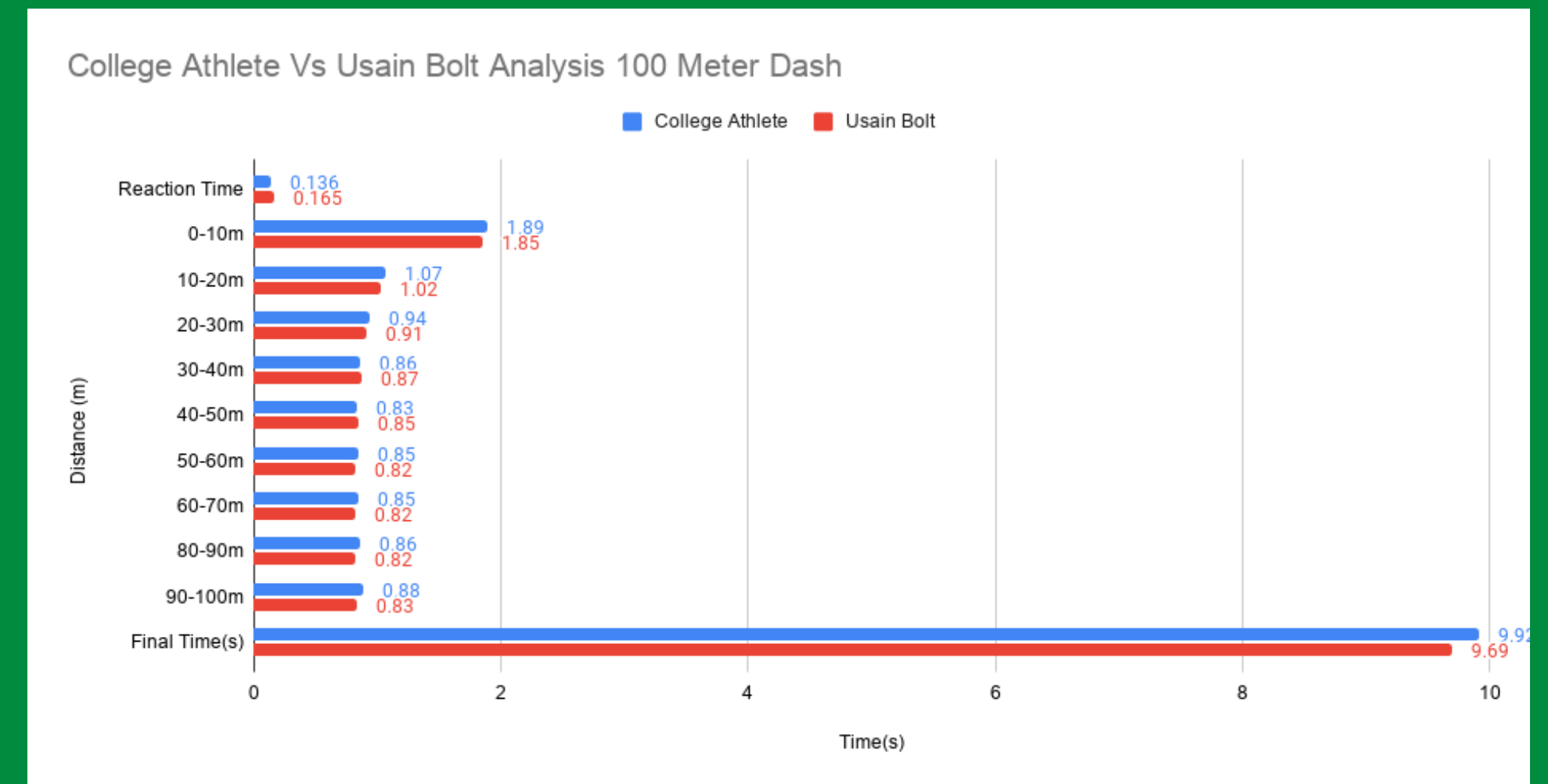


- ✦ Line of attack
- ✦ Second step
- ✦ Impulse off the block
- ✦ Sensors on the block
- ✦ Starter gun reaction time

Instantaneous Velocity

- ✦ Use infrared sensors to measure instantaneous velocity
- ✦ One sensor every 10m

Data Analysis

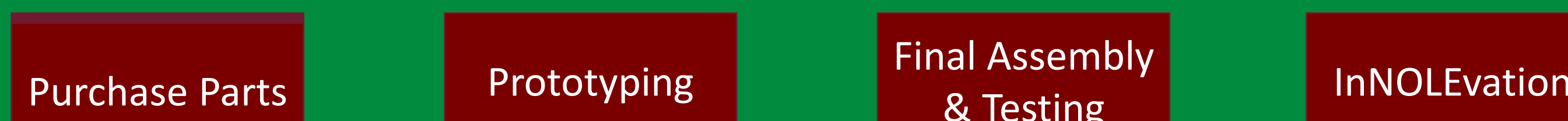


- ✦ Collect data
- ✦ Compare data
- ✦ Capture Trends
- ✦ Use trends and data for prediction analysis

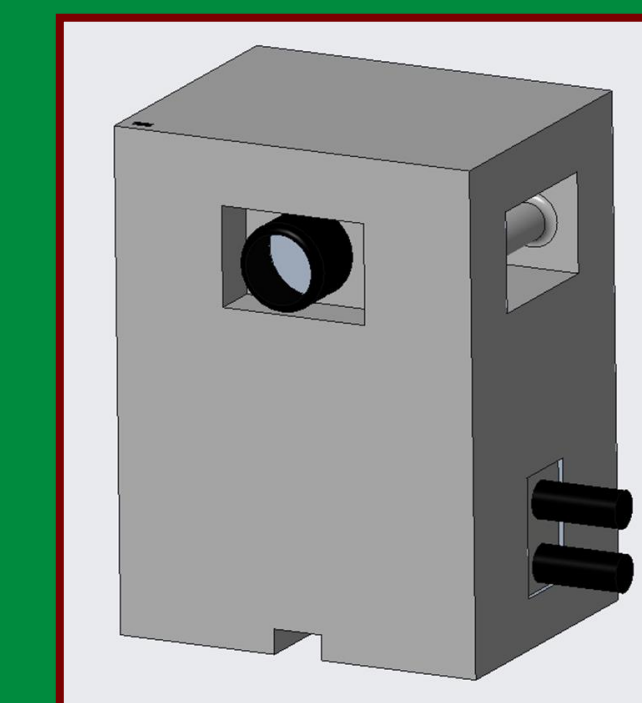
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- ✦ Dr. Clark
- ✦ Coach Argro
- ✦ Michael Ormsbee
- ✦ Dr. McConomy
- ✦ Ms. Gray
- ✦ Dr. Hooker

Future Work:



CAD Model:



InNOLEvation Team:

