

Internship 2022



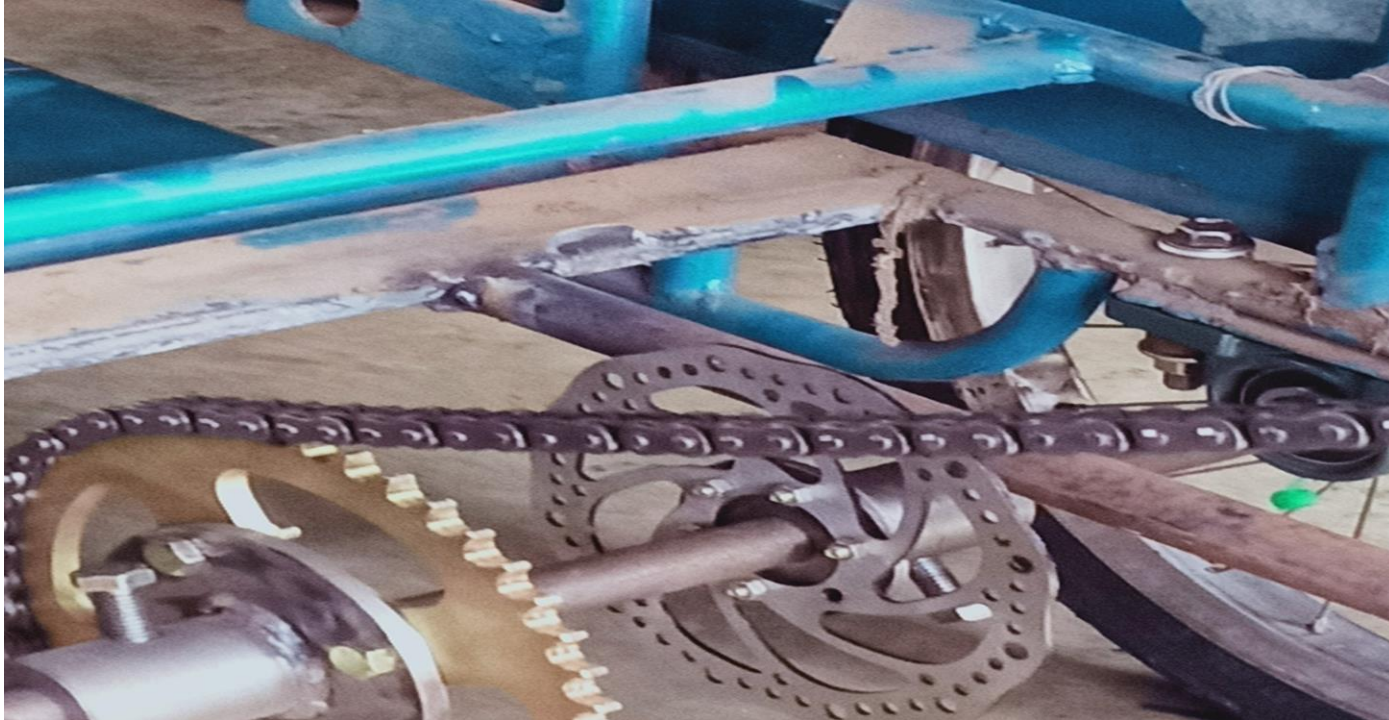
JIBE BE

Be on the move

Name: EMMANUEL NJENGA

Tasks completed last week

- [#31] Fabrication and assembly of the tricycle



- [#56]Design of the transmission system of the shujaa tractor
From calculations the gear ratio for the two modes of operation were;
 1. Working mode=47.98
 2. Driving mode=17.59

The chain drive provides a gear ratio of 3.

Taking this into consideration the reduction to be provided by the gearbox in working mode is

$$47.98/3=15.993333$$

Tasks in this week

- [#64]Acquisition of parts for the shujaa tractor

Timeline

Month	Intern week	Tasks
Jan	Week 1	Taking measurements and 3D modeling of the tricycle Identification of parts
	Week 2	Design of chain drive, Shaft design Disassembly of the tricycle
Feb	Week 3	Acquisition of parts Fabrication and assembly of the tricycle Literature review on e-tractors
	Week 4	Identification of parts to be replaced Calculation of power requirements for the shujaa tractor Measurement of chassis
	Week 5	Design of various transmission components 3D modeling of the Shujaa tractor
	Week 6	Vibration and stress analysis Acquisition of parts
March	Week 7	Fabrication and assembly of Shujaa tractor
	Week 8	Testing and performance analysis