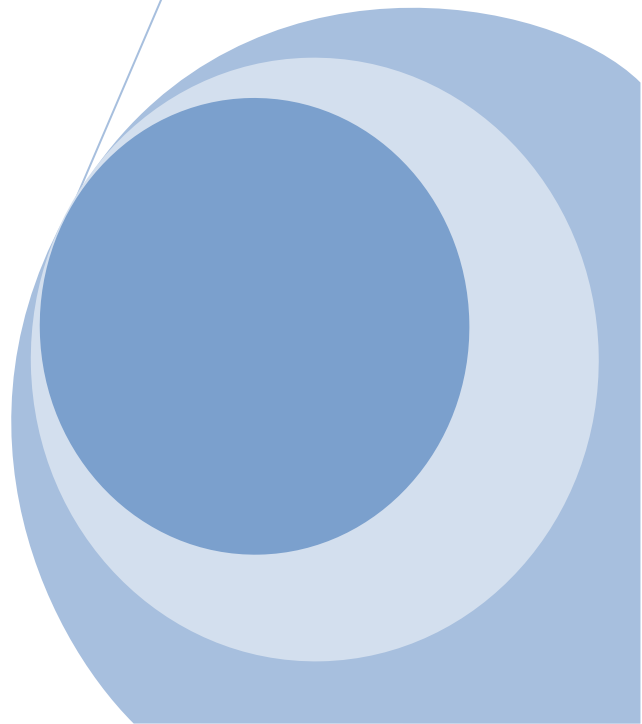
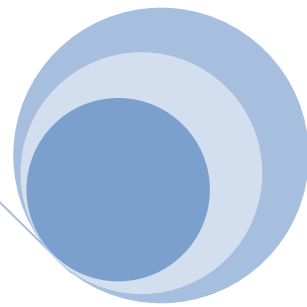
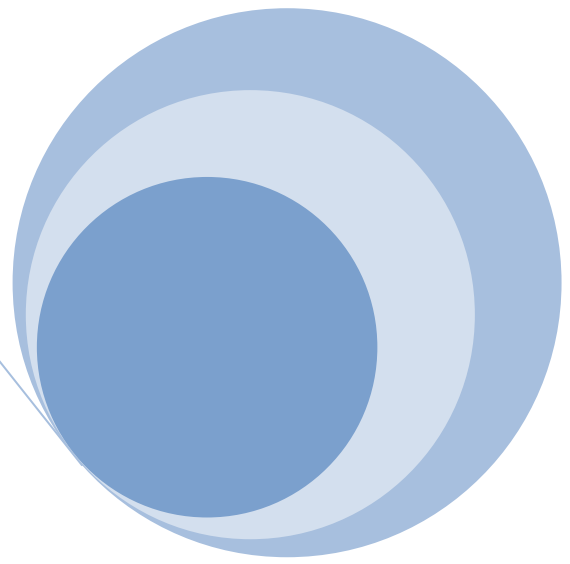


Run fast and
jump high!



Run fast and jump high!

1) Which problem are you trying to solve?

Our human speed is limited, so I will create this boots to make our bodies run faster.

2) How are you going to solve?

I'm going to build new boots that can be our next generation of fitness, faster and leaner future transportation. It will be equipped with strong and flexible springs, incredible design for maximum efficiency and agility.

3) How can the project be manufactured in the OpenLab ?

It's a big opportunity for me to create this prototype in your Lab, where you have 3D printers, laser cutter, shaping machinery.

Also my project need tough and soft materials like carbon fibers, Aluminum, flexible and strong springs.

4) What is the impact of your project?

My project will bounce the world! By having those boots on your feet it will make you run faster and jump wherever you are!

It will improve:

- ✓ Our core strength , positive effects on the body : muscles , cardiac health ...
- ✓ Suitable for children, adults, soldiers for military activities...

- ✓ Enjoyable activity ...
- ✓ Increase vertical jump.

5) Describe your project in detail.

Since I was child, I have been dreaming of one day running and jumping so fast as a car or leopard!

I want to experience the sensation and the feelings of speed , that' s why I want to use the technology in your Lab to develop more my idea with you as experts, professors and engineers.

Firstly , as I'm industrial engineering student , I want to create and product a machine that can make our bodies run faster, this boots were designed to follow the movement of the leg.

They were engineered to be tough and have a light weight, with solid and soft materials to achieve a high maximum response and extreme energy transfer.

In addition, this boots are equipped with strong and flexible springs, they provides the runner with more down force when jumping and running.

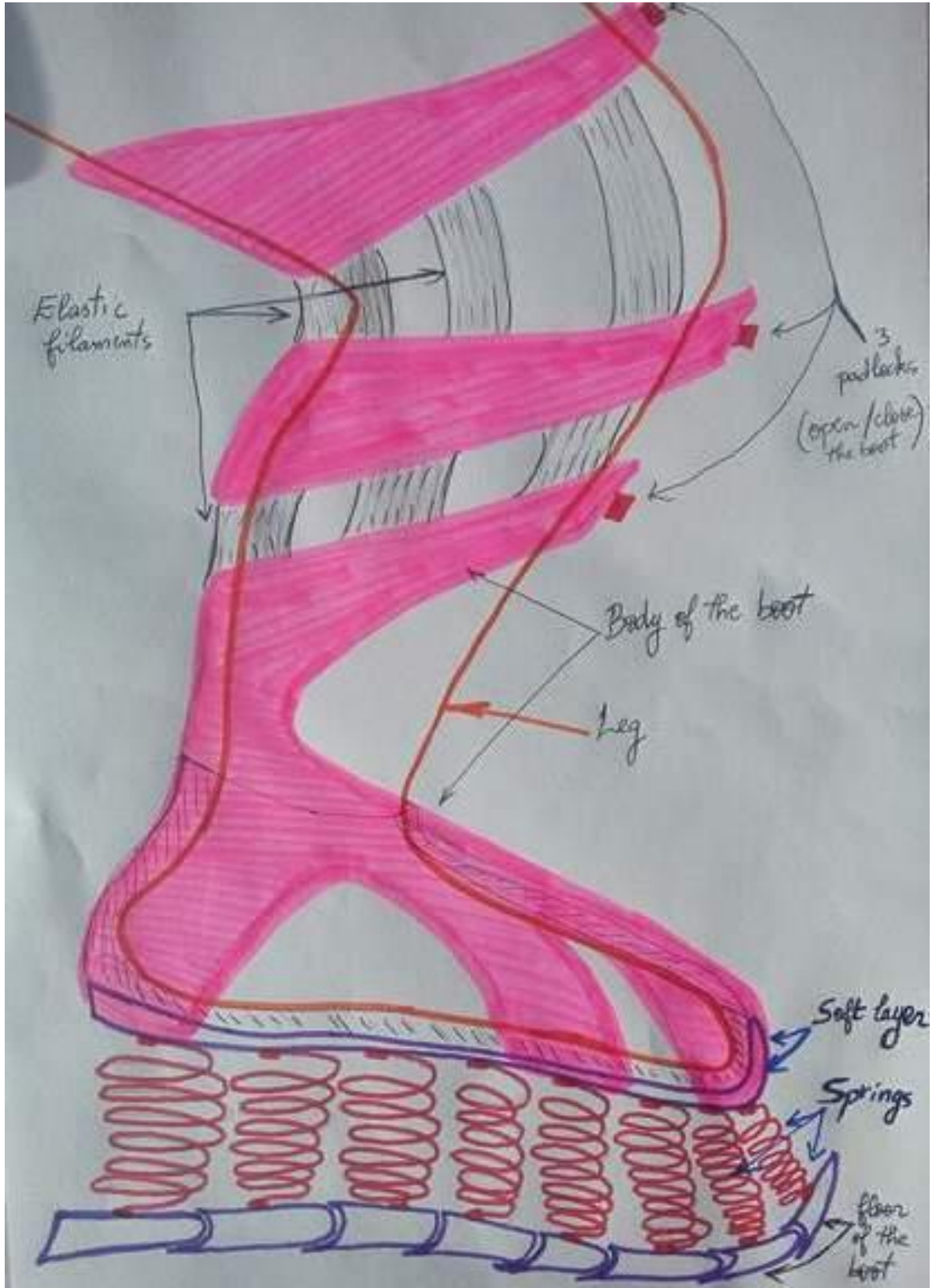
Added to this, I took a smart technic from aerospace engineering, it was: "the flaps of aircraft".

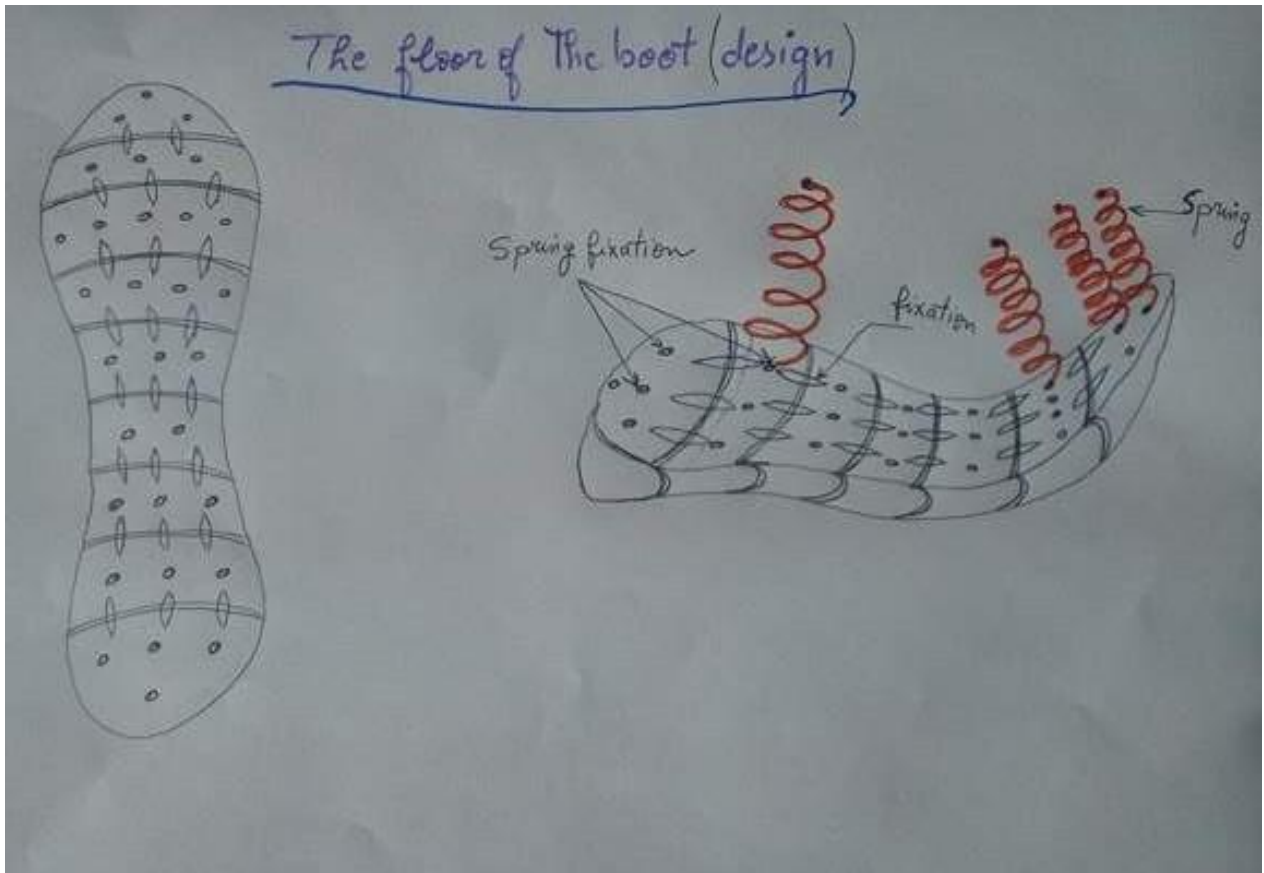
I applied this technic in the floor of the boot to let the movement more dynamic and healthy.

In conclusion, this project will create the buzz in the world industry technology, I hope that you give me opportunities to make it feasible and build it in your advanced Lab.

So let's make a difference together !

6) Design Photos:





7) Physics and Safety :

Physical equilibrium is taking account by balance forces for safety and relaxing movement in case of sudden standstill after running or returning positions.

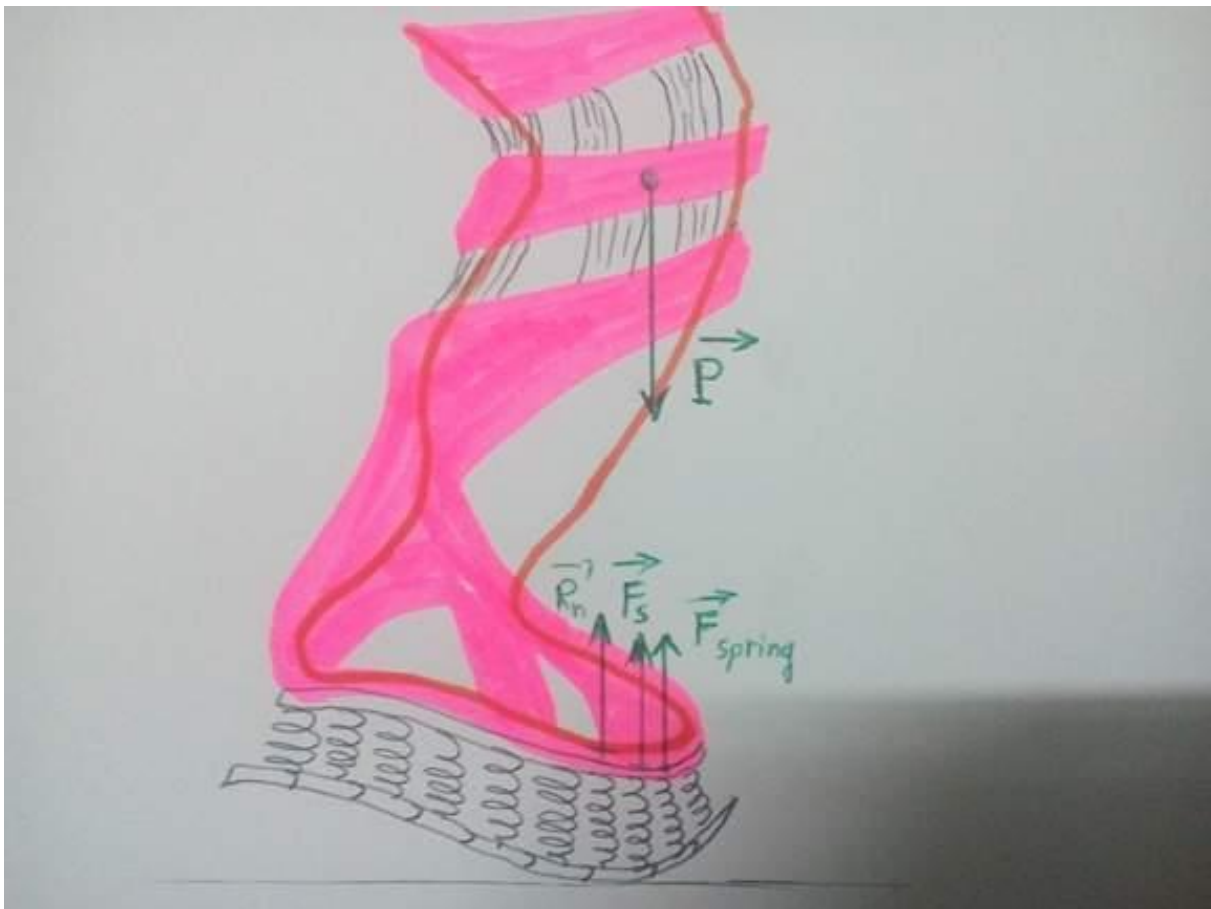
See the following figure:

P : weight force of gravity .

F_{spring} : Force of spring.

R_n : Normal reaction force.

F_s : Force of static friction.



Thank you for your attention !