Thesis Software

How to use Cmake from start

→ Install cmake , Install Eigen

→ Include Eigen installation Folder in cmake

→ delete build directory if any

→ create ~~make~~ build Folder

→ Cmake .. → tell cmake to retrieve CmakeList from Parent Folder

→ make → builds the executable,

1) If no new file added to CMakelist.txt or no change, to it

↓

After first build, Launch

make

2) If any change to CmakeList.txt

- Enter build Folder
- cmake ..
- make

Thesis Software Structure

step 1 → Trajectory Generation or simulation with a specific $K_r, K_{L,b}$

↳ ticks are generated

↓

x, y, θ poses are generated

~~Start~~

mySimTest_mul_velocities.cpp

↓ 3

Takes in pairs of v, w

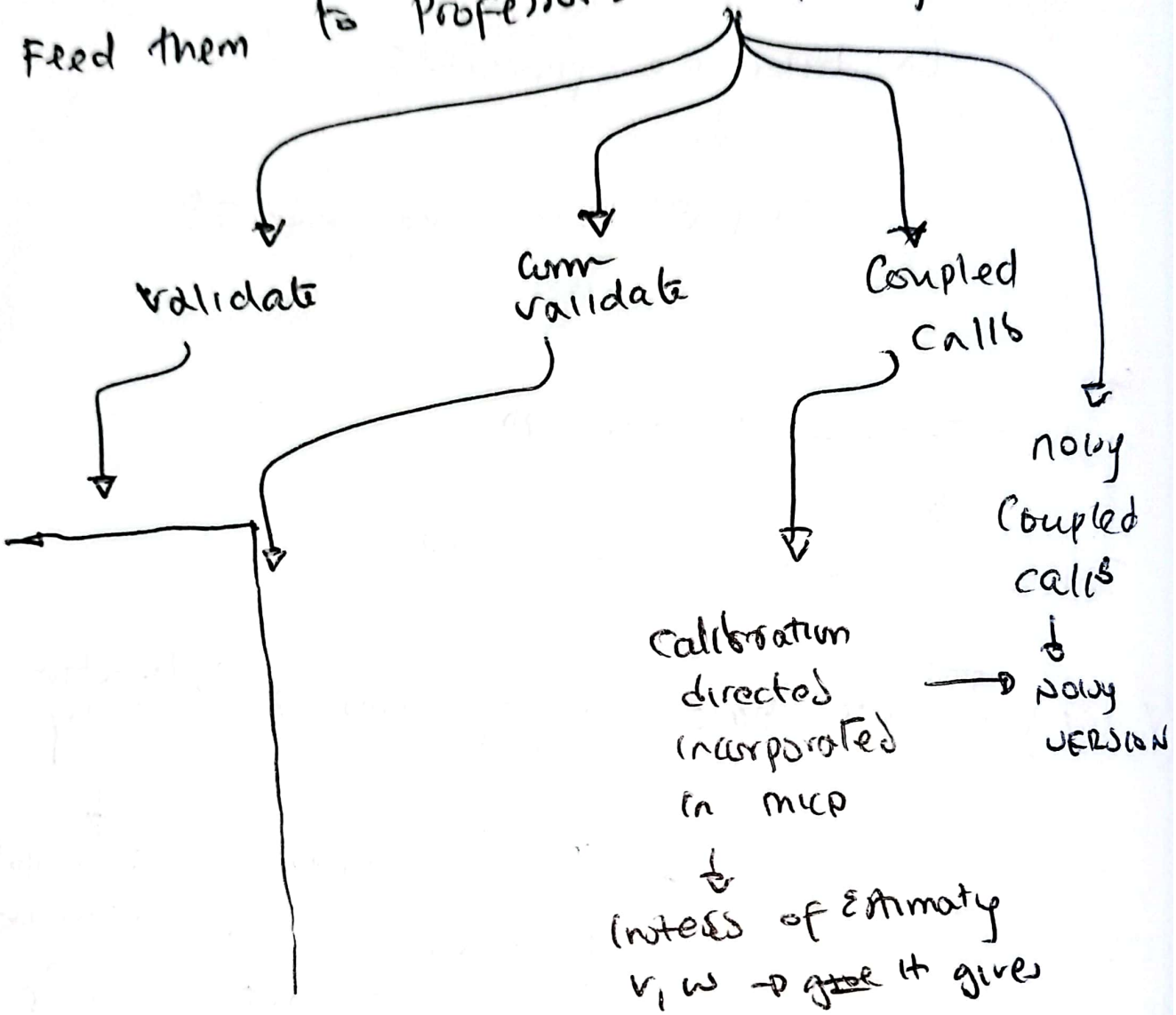
(v_i, w_i) → we have num of scans x integration step

↓ Corresponds to number of poses because we simulate that at each pose, it takes a complete scan of 360 points

↓ timeslot between each poses or ~~scan~~ SCAN

Apter generating scans
index Form of ρ, α_i, time stamps

Feed them to Professors mlcp algorithm



multiple Velocity Calibrator Folder

↓

After MICP has estimated the velocities

→ write them in a file

→ Read the ticks data file

→ Estimate K_n, K_L & b