Sensor fusion with Deep Learning

1st Jires Donfack Voufo

***Abstract*—**

I. Motivation

- Convolutional Neural Network (extraction of features in the data)
- Combining data from 2 or more sensors to get a better understanding of the environment we try to monitor/control
- System with sensor fusion is more consistent, accurate and dependable (increase quality of the data)
- 4 steps of an Autonomous system:
  1)Sense (data collection)
  2)Perceive (interpret the data)
  3)plan (make a decision)
  4)Act (take action)
- Example: use Magno meter with gyroscope and accelerometer to measure the position/ orientation of a cellphone
- Example of Fusion algorithms (Kalman filter)

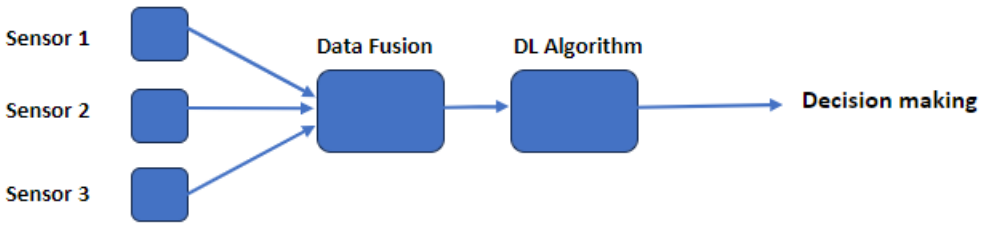

Fig. 1.

II. Foundation

III. Conclusion

References

References

[1] https://de.mathworks.com/videos/sensor-fusion-part-1-what-is-sensor-fusion-1569410785813.html