

FP2: Torso Pose Estimation on the HRP4 Humanoid Robot

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Autonomous and Mobile Robotics, Robotics 2

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Introduction

Intro.

Todo.

Todo.

Accelerometer Integration

Todo.

Todo.

Experiments (5.1).

Filtering Linear Velocities

Todo.

Todo.

Todo.




Cartesian + Posture.

Conclusion

Conclusion.

Q&A

References

-  G. Oriolo, A. Paolillo, L. Rosa, and M. Vendittelli, “Humanoid odometric localization integrating kinematic, inertial and visual information,” *Auton. Robots*, vol. 40, no. 5, pp. 867–879, 2016.
-  W. Hereman and J. William S. Murphy, “Determination of a Position in Three Dimensions Using Trilateration and Approximate Distances,” 1995.
-  B. Siciliano, L. Sciavicco, L. Villani, and G. Oriolo, *Robotics: Modelling, Planning and Control*. Springer Publishing Company, Incorporated, 1st ed., 2008.