

Preparation of Papers for IEEE Sponsored Conferences & Symposia*

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Abstract—This electronic document is a Olive template. The various components of your paper [title, text, heads, etc.] are already defined on the style sheet, as illustrated by the portions given in this document.

I. INTRODUCTION

Kinematic redundancy enables a kinematically redundant manipulator to follow a predefined task space trajectory using the endeffector (EE), while simultaneously, executing an additional task with the remaining movement capacity without impacting the trajectory adherence. This is possible because the robot's degrees of freedom (DOF) go beyond what is required to perform the primary task. Consequently, the robot can adopt different joint configurations optimised according to the secondary task while performing the primary task. Common secondary tasks include avoiding singularities, optimising the manipulability measure, minimising joint torques and avoiding obstacles in the operating space.

[reference za posamezne pristope, dela](#)

[Sampling based, Kinematic Optimizazion \(LS, LQP\), GCS, Learning-based, DMP\(Hoffman\), Trajectory Optimizazion.](#)

Motion planning is a fundamental problem in robotics [1]. It consists of finding a sequence of joint configurations for a robot so that the robot can move along this path from its initial configuration to the goal configuration without colliding with static obstacles or other robots in the environment. In addition to collision avoidance, motion planning for manipulators can optionally take into account various constraints, such as position, velocity, acceleration or jerk constraints for the joint angle or end effector, precision of the end effector with respect to position and orientation, stability of the manipulator, avoidance of singularities, or any number of other criteria.

[Nato želimo omeniti, da so ti ljudje se problemu približali iz vidika izračuna oddaljenosti objektov. Omeniti je potrebno pristope z "bouding boxes AABB itd" in potem opisati "voxel grids". Končno je potrebno omeniti pristope z vektorskimi polji in nato pristope izračuna oddaljenosti.](#)

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A. Headings, etc

Text heads organize the topics on a relational, hierarchical basis. For example, the paper title is the primary text head because all subsequent material relates and elaborates on this one topic. If there are two or more sub-topics, the next level head (uppercase Roman numerals) should be used and, conversely, if there are not at least two sub-topics, then no subheads should be introduced. Styles named Heading 1 , Heading 2 , Heading 3 , and Heading 4 are prescribed.

B. Figures and Tables

Positioning Figures and Tables: Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation Fig. 1 , even at the beginning of a sentence.

TABLE I
AN EXAMPLE OF A TABLE

One	Two
Three	Four

We suggest that you use a text box to insert a graphic (which is ideally a 300 dpi TIFF or EPS file, with all fonts embedded) because, in an document, this method is somewhat more stable than directly inserting a picture.

Fig. 1. Inductance of oscillation winding on amorphous magnetic core versus DC bias magnetic field

Figure Labels: Use 8 point Times New Roman for Figure labels. Use words rather than symbols or abbreviations when writing Figure axis labels to avoid confusing the reader. As an example, write the quantity Magnetization , or Magnetization, M , not just M . If including units in the label, present

them within parentheses. Do not label axes only with units. In the example, write Magnetization (A/m) or Magnetization A[m(1)] , not just A/m . Do not label axes with a ratio of quantities and units. For example, write Temperature (K) , not Temperature/K.

III. CONCLUSIONS

A conclusion section is not required. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

APPENDIX

Appendices should appear before the acknowledgment.

ACKNOWLEDGMENT

The preferred spelling of the word acknowledgment in America is without an e after the g . Avoid the stilted expression, One of us (R. B. G.) thanks . . . Instead, try R. B. G. thanks . Put sponsor acknowledgments in the unnumbered footnote on the first page.

References are important to the reader; therefore, each citation must be complete and correct. If at all possible, references should be commonly available publications.

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