

**Position Error Estimation and Compensation of 3-DOF Delta Robot under the effect of Link Tolerances**

Weekly Report

*Submitted by*

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SECTION A

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**Week No. 4**

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| **Sl. No.** | **Date** | **Details of work carried out** | **Comments** |
| 1 | 31/10/21 | **Inverse Kinematics**  Since the need for inverse kinematics was understood, the modelling of IK was done. |  |
| 2 | 1/10/21 | **Error Compensation using Inverse Kinematics**  Error compensation was carried out using the inverse kinematic model developed earlier. |  |
| 3 | 2/10/21 | **Drawing Conclusion**  After four weeks of analysis, modelling and simulation work , It was time to draw definite conclusions on the results we had obtained . We successfully concluded with concrete evidences obtained through the successful research carried out. |  |
| 4 | 3/10/21 | **Complete Documentation**  A day taken out for proper documentation of the project inorder to submit it according to institution norms. |  |
| 5 | 4/10/21 | **Future Research Prospects Discussion**  A session on future prospects of research in this domain was discussed which ended up with good output. |  |
| 6 | 5/10/21  -  10/10/21 | **Manuscript Preparation**  As planned a manuscript was prepared according to materials today proceedings template for the “**International Conference on Recent Advances in Modeling and Simulations Techniques in Engineering and Science**  **(RAMSTES-2021)**” to be held between 8-10th December 2021 hosted by Manipal University Jaipur. |  |
| **Summary of the work done in the week:**  The final week of the project comprised of error compensation using inverse. The error was compensated and successfully resulted in the end of research procedure. Further verification and documentation were done, following preparation of manuscript for MUJ-RAMSTES 2021 “**International Conference on Recent Advances in Modeling and Simulations Techniques in Engineering and Science”.** | | | |

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| **Challenges faced during the work:**  The successful drawing of conclusions with respect to few scenarios was a challenge faced here. |
| **References:** |
| **Remarks:** |
| **Suggestions by the guide:** |
| **Signature of Student Signature of the guide** |