Nonlinear Control Projects

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- ▶ Please make a group of four people.
- ▶ Choose one of the given project topics
- ▶ Submit name of your group members and desired topic.
- ▶ Provide a comprehensive report on the popular approaches introduced in the literature for the chosen problem
- ▶ And also simulation results on a practical system employing the given approaches.
- ▶ Provide a 15-20 min presentation
- ▶ A date will be announced for presenting the projects
- ▶ Presentation of all registered students in mandatory during seminar dates.
- ▶ All group members should be ready for presentation, the presenter will be selected by instructor at the date of seminar.

Projects Topics

1. Slowly Varying Systems
2. High Order Derivatives of Lyapunov
3. Domain of Attraction; Estimation and Enlargement
4. Singular Perturbation Techniques
5. Centre Manifold Theorem
6. Nonlinear Observers
7. Stability Analysis of Time Delayed Systems
8. Dynamic Sliding Mode Control
9. Control of Non-Minimum phase systems
10. Control of Underactuated Systems
11. Robustifying Feedback Linearization Methods