

DES Final Project

The objective of this project is to analyze a well-established model (undergraduate level) or develop a new model (graduate level) for a particular application of your choice. For a graduate-level project, the development can start from a scratch or be an extension of an existing one. This project will help reinforce the concepts related to discrete event systems modeling and analysis.

You are required to submit a project proposal by March 26th to des09468@gmail.com. The proposal should briefly describe the application of your choice, any modeling techniques to be involved, and references.

You will demo this project on April 30th and May 7th. A written report is due on Monday to des09468@gmail.com, May 8th, 11:59 pm.

Graduate students: Undertake a research project and develop, analyze and/or validate a new model to address a specific problem of your interest. Acceptable projects can be but not limited to: a) conduct experimental evaluation of existing models and associated algorithms; (b) develop a new model of prior work; (c) develop a new solution to an existing problem; (d) solve a new technical problem using existing modeling methods

Undergraduate students: Identify a particular application of the modeling techniques that covered or not covered in class from a recent IEEE journal (>2013), and implement and validate the method yourself rather than using any code the authors provided.

This is a group project. The maximum number of group members is two. The project will be graded on its demo presentation (20 points) and final report (80 points). A peer evaluation form for demo presentation will be posted on the web soon.

For an undergraduate project, the final report needs to clearly present:

- Purpose of the study
- Details of the DES model
- Analytical method you took to validate the model
- Analysis results as for the pros and cons of the model
- Conclusion

For a graduate project, the final report needs to clearly present:

- Purpose of the study
- Details of the DES model
- Analysis and validation processes
- Conclusion (you have to clearly state your contributions. If you improve/extend an existing one, you have to justify your improvement)

For both projects, if your analysis involves a simulation/implementation part, you are required to submit your simulation/implementation code. It is your responsibility to provide a clear instruction to your instructor as for how to use your code and to make sure your code will work once it is downloaded to your instructor's PC. Your code will not be considered as a valid submission if it is not compliant with software available at Rowan University.