

Advanced Applications of Monte Carlo Methods

CS798 - Spring 2016 - Program and Schedule

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Revised Schedule

Week	Topic	Assignments/Project Deadlines
1	Course Guidelines	
	Introduction	
2	Overview of Monte Carlo Integration Methods	
	Uniformed Monte Carlo Methods	
3	Informed Monte Carlo Methods	
	Light Propagation / Radiometric Quantities	Assignment 1, May 19 th
4	Bidirectional Scattering Distribution Functions	
	Light Transport Equation / Random Walk	
5	Ray Tracing Overview	
	Path Tracing	Assignment 2, June 2 nd
6	Directional Probability Densities	
	Radiosity Overview	
7	Radiosity via Ray Tracing	
	Multipass Methods Overview	Project Proposal, June 16 th
8	Information Transport	
	Biophysical Review	
9	Data Collection Issues	
	Model Design Issues	
10	Project Status Report	July 5 th
	Evaluation Issues	
11	Case Studies	
	Case Studies	
12	Project Presentations	July 19 th
	Project Presentations	July 21 st
	Conclusion	Project Written Report and Code, July 26 th

Important notes:

- **Take home final exam** will be available on the last day of classes, July 26st, and it should be returned to the instructor on August 9th at 16:30.
- Assignments, project report and final exam must be prepared using latex. Otherwise they will receive **ZERO** marks.
- Assignments, project report and final exam submitted after the corresponding deadlines will receive **ZERO** marks.