



Smart Mobile Platform Syllabus

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- Objectives: **A.I. Techniques for Mobile Platforms**
- Hours/Location: 9am-12pm @ Engineering Building 366
- Instructor: **Joongheon Kim**
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- Contents
 - Deep Neural Network
 - Deep Reinforcement Learning
 - Inverse Reinforcement Learning and Imitation Learning
 - Federated Learning
 - Lyapunov Optimization



Class Schedule

Week	In-Classroom	Paper ID	ETC
01	Syllabus and Introduction	Paper Reading List will be announced before next Monday	
02	Deep Neural Network (Basics – Regression/Classification)		
03	Deep Neural Network (Basics – Neural Network/CNN/RNN)		
04	Deep Neural Network (Paper Reading)		
05	Deep Reinforcement Learning (Basics)		
06	No-Class		
07	Deep Reinforcement Learning (Paper Reading 1)		
08	No-Class		
09	Deep Reinforcement Learning (Paper Reading 2)		
10	Inverse Reinforcement Learning and Imitation Learning (Basics),		
11	Inverse Reinforcement Learning and Imitation Learning (Paper Reading 1)		
12	Inverse Reinforcement Learning and Imitation Learning (Paper Reading 2)		
13	Federated Learning and Distributed Deep Learning Computation		
14	Lyapunov Optimization		
15	Final Project Presentations		
16	No-Class		



- Grading Criteria

- Paper Summary Note Submission → 40%
 - Paper presentation volunteers will get additional credits.
- Take-Home Exam (midterm) → 20%
- Take-Home Exam (final) → 30%
- Final Project → 10%
 - Final project slide submission is mandatory.
 - Final project slide presentation opportunities will be given to selected students.