# Al and System Course Introduction

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September 2, 2024

## Outline

- 1. Announcement
  - 1.1. Announcement
  - 1.2. What you have to do
- 2 2. Prof. Info.
  - 2.1 Info I
  - 2.2 Info II
  - 2.3 Info III
- 3. Course Info.
  - 3.1. Course Overview
  - 3.2. Grade Policies
  - 3.3. Course Topics

# Course Principle

## Principle

- Let us start at 6:30 from the next class
- Don't be late at the beginning of each class
- Cheating behaviors have the greatest penalties

## Homework-Homepage

- Make your own homepage
- Recommended Address: https://kitst.kumoh.ac.kr/~ sURL/sys
  - $\bullet$  ex) http://kitst.kumoh.ac.kr/ $\sim$  s20231111/sys
- Your picture & "I keep the promises between Prof. and I"
- Due date : September 9th (Monday) Midnight

## Instructor: Hyunsoo Lee

#### Academic Career

- 1) 2006~2010 : Ph.D , Industrial & Systems Engineering, Texas A&M University
- 2) 2000~2002 : MS, Industrial & Production Engineering, POSTECH
- 3) 1993~1997 : BS. Industrial Engineering, SKKU

#### More Info.

• Prof. Homepage : http://kitlab.kumoh.ac.kr/~hsl

#### Professional Career

- 1) 10. 2021  $\sim$  : Prof.
- 2)  $09.2016 \sim$  : Associate Prof.
- ullet 3) 09.2011 $\sim$ 08.2016 : Assistant Prof. / School of Industrial Engineering / Kumoh National Institute of Technology
- 4) 2010~2011 : Senior Manager, SCM Division, LG Electronics
- 5) 2009~2010 : Teaching Instructor, Texas AM University, USA
- 6) 2006~2019 : RA / TA, Texas AM University, USA
- 7) 2002~2006 : Advisory Consultant, Samsung SDS

# **Project**

## Project Info.

Project Info : Refer Course Homepage

## Course Overview

### Course Info.

- Course No: IDI045-01
- Course Title : Al and System
- Course Homepage : http://kitlab.kumoh.ac.kr/~hsl/courses/aisystem
- Course title
  - ullet Course time: 06:30PM  $\sim$  09:30 PM, Every Tuesday, G702

- 3.2. Grade Policies
- 3.3. Course Topics

## **Grade Policies**

#### Score Portion

Midterm I/II (30%) Final (35%) Quiz & Homework (20%)
 Attendance (10%) Attitude (5%)

#### **Basic Policies**

- 1) Research & Implement Performances
- 2) Attendance
- 3) Prior execuse for absenses (ill, care, job interview)
- 4) Don't miss Midterm/Final Exams
- 5) Don't interrupt class

- .1. Course Overview
- 3.3. Course Topics

## To be Covered

## **Topics**

- 1) Reinforcement Learning
- 2) Deep Reinforecement Learning
- 3) System Dynamics
- 4) Differential Equation & System Dynamics
- 5) Intelligent System

- .2. Grade Policies
- 3.3. Course Topics

# Maint Computer Programming Tools

### Tools

- 1) Matlab / Simulink with Related Toolboxes
- 2) Python and Related libraries