

Idea Seminar

Aim: built the physical version of turtle robot (**Digital to Physical**)

Midterm: presentation of 10 concepts and present your own concept with its literature review

Final Project: robot + camera + data analyzing + smile

Main points for final project: Approach / Input / Output / Decision / Algorithm / Process

References: Media lab MIT, Carnegie Mellon University + ACADIA + eCAADe + TED + CAAD Futures + IEEE VIS +

- Create an account in GitHub and use class repository for upload your assignment

<https://github.com/coditect/arch7210-fall2019>

- Drawing some geometric shapes with turtle (Turtle Tutorial)
- Definition of Spirograph, Epitrochoid and Hypotrochoid
- Drawing Spirograph shapes
- Develop and change of Epitrochoid's code

<https://www.101computing.net/python-turtle-spirograph/>

- Using some jitter and disorder in your drawing
- Using random color in your drawing
- Drawing artistic shapes
- Have a creative in your drawing
- Consider two or three turtles for your drawing
- Use the specific function for each turtle
- Two turtles see each other or follow each other
- What is the Pseudocode?

For each row in trips, draw a line between start and end point

Browse book and see color photos

- Create new function in turtle library / for your robot, midterm and final project

Class modified turtle (Turtle)

Def make square (self)

- Introduction of NetLogo

<https://ccl.northwestern.edu/netlogo/>

- Introduction of the nature of code

<https://natureofcode.com/>

- Study about flocking simulation
- Pay attention to Calculation / Vicinity / Angel / Forces / Distance /
- Introducing robot parts (raspberry / Arduino / Adaptor)
- Course description (Kadenz)

<https://www.kadenze.com/courses/the-nature-of-code/info>

- Pay attention to the Object-oriented programming

<https://www.py4e.com/html3/14-objects>

- Pay attention to robot. Turtle
- Mathematic PDF
- Enter all of your steps and explanations in the trello

<https://trello.com/b/g7lkgvTl/arch-7210-idea-seminar>

- Start out own project
- Developing our project as an object orientated programming
- Analysing 10 new paper about top topics in the digital fabrication
- Python and RhinoScript