NTDS'19 Schedule 17/09/2019 Date Topic Instructor Room Deadline Vandergheynst, Defferrard CE2 17.09 Introduction 18.09 Graph theory basics Frossard CO<sub>2</sub> Installation & basics CE<sub>2</sub> 24.09 25.09 Random networks Frossard CO<sub>2</sub> CE<sub>2</sub> Scale-free networks Frossard 01.10 group registration Assignment 1: network properties & models CO<sub>2</sub> 02.10 08.10 Assignment 1: network properties & models CE2 Network formation models Frossard CO<sub>2</sub> 09.10 Assignment 1: network properties & models CE2 15.10 assignment 1 16.10 Elements of spectral graph theory Loukas CO<sub>2</sub> CE<sub>2</sub> Unsupervised learning with graphs: spectral clustering Loukas Assignment 2: spectral, GSP, GNN CO<sub>2</sub> Assignment 2: spectral, GSP, GNN CE2 Unsupervised learning with graphs: dimensionality reduction Loukas CO<sub>2</sub> Regularization on graphs with graph signal processing CE<sub>2</sub> Loukas Assignment 2: spectral, GSP, GNN CO<sub>2</sub> Supervised learning on graphs with deep learning: part I Defferrard CE<sub>2</sub> Supervised learning on graphs with deep learning: part II CO<sub>2</sub> Defferrard Assignment 2: spectral, GSP, GNN CE<sub>2</sub> assignment 2 **Project** CO<sub>2</sub> CE2 **Project** CO<sub>2</sub> Network epidemics Frossard 03.12 Visualization Miz CE2 project summary CO<sub>2</sub> 04.12 Project 10.12 CE2 Project peer review

22.10 23.10 29.10 30.10 05.11 06.11 12.11 13.11 19.11 20.11 26.11 27.11

CO<sub>2</sub>

CE2

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report and repository

slides

Project

Project

21.01 Project presentation

Project presentation

Handle project report and github repository

18.12 Project

11.12

17.12

10.01

22.01