Feature Engineering Studio: Syllabus

- **Course:** HUDK 5053, Teachers College, Columbia University
- **Instructor:** Charles Lang, charles.lang@tc.columbia.edu, @learng00d
- **Day/Time:** Tuesdays/Thursdays, 4:40pm - 6:45pm
- **Location:** GDH 273B
- **Instructor Office Hours:** By Appointment - [Please make an appointment to attend office hours here](#) (If no appointments are available or you cannot attend those that are please send an email to charles.lang@tc.columbia.edu and CC amy@x.ai)
- **Prerequisite:** HUDK 4051
- **Credits:** 3

Course Description

Feature Engineering Studio is a core course of the Learning Analytics Program and preference is given to students within this course of study. FES is a design studio style course that tackles real world data problems assocaited with technology use in education. Students will work in groups with outside organizations on data projects pertinent to eudcational problems. They will be required to respond to briefs supplied by the organizations and perform all parts of the workflow to generate data solutions for those organizations including, data cleaning and access, feature engineering and distillation, visualization, and final deliverables.

Educational Goals

- Obtain experience with real-world educational data problems in context
- Setup an automated data collection operation
- Begin a project for use as Capstone project
- Develop workforce readiness and job search skills

Assessment

Assessemnt is broken down into team and individual deliverables.

Individual Deliverables:

- SQL Test
- Updated LinkedIn account
- Updated Github account

- Attend a relevant EdTech/Data Science event

Team Deliverables

Class Project

- Design & deliver a section of an Online Class in which you collect data
- Presentation of analysis of that data

Placement Project

- Memorandum of understanding including description of deliverables signed by supervisor
- Privacy policies that govern data use & any specific non-disclosure agreements
- Project timeline, finishing date and division of labor in ClickUp
- Final deliverable as defined in consultation with placement supervisor

Relationship to Learning Analytics Program Capstone Project

Site projects started in FES are intended to become Capstone Projects for completion of the Learning Analytics Masters Program.