Beyond the MOOC Environment: Enriching Learner Models through the Social Web

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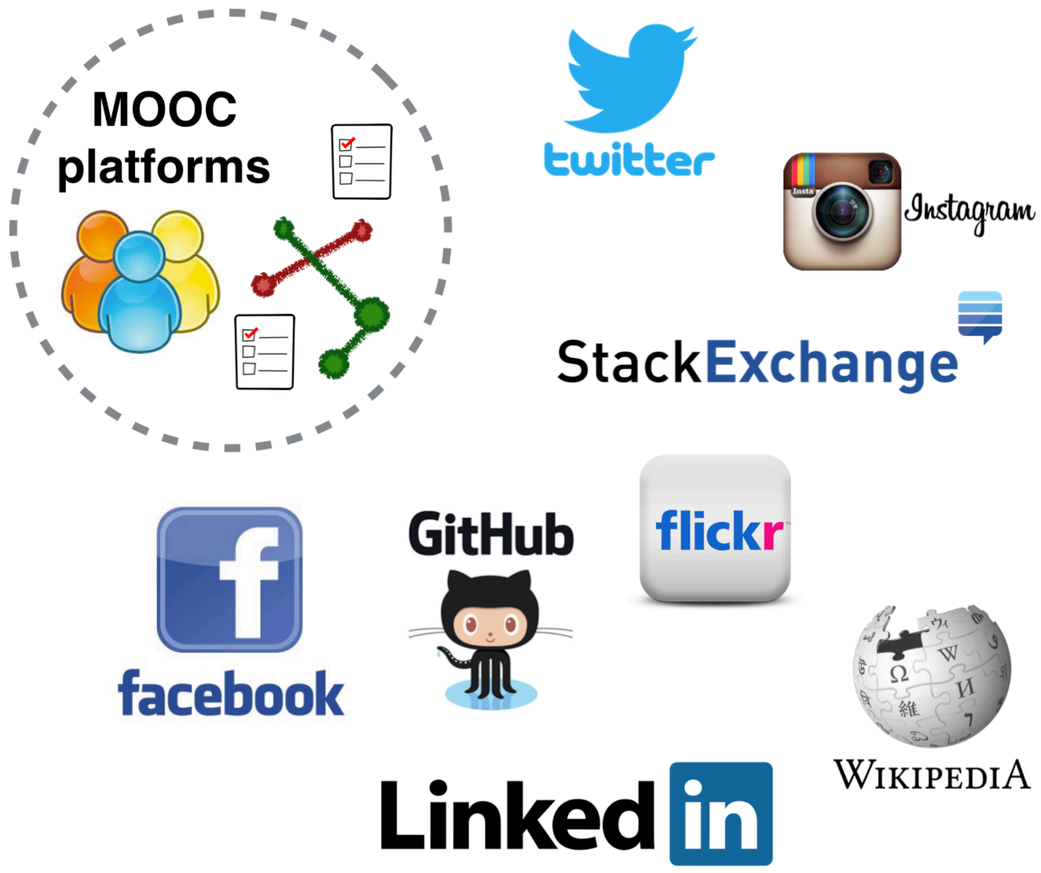
1 Introduction

- Existing research on MOOCs relies mainly on the **log traces** that learners generate **within the learning platform** itself, e.g., survey responses, video interactions, quiz answer submissions.
- This data is limited in that we know a lot about the state of the learner **during the MOOC**, but nothing about him **before or after** he finishes/drops out of **the course**.

Proposal: The *Social Web can be mined to enrich MOOC learner models.*



2 Research Questions

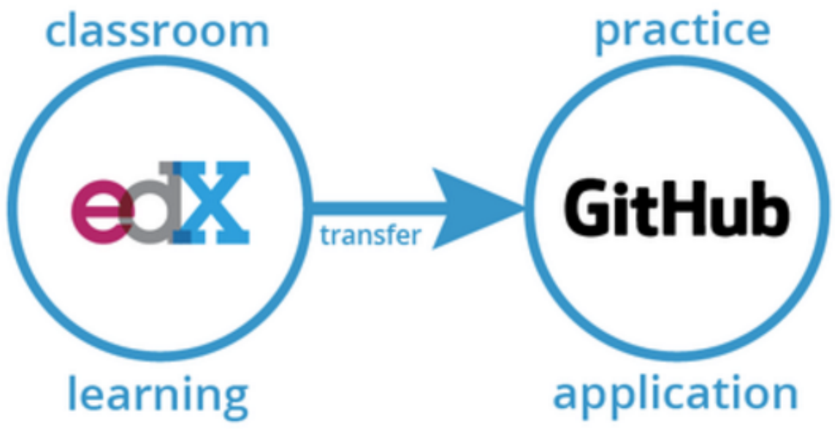
- What **user attributes**, likely to be relevant to **learning**, can be mined from the **Social Web**?
- What useful **interventions** can be developed based on learner **attributes**?

Instantiations of these research questions include modeling learners' interests to recommend learning material, assisting the learning process by leveraging users' profile information (e.g., personality) and measuring the amount of learned knowledge transferred to practice (i.e., measuring learning transfer).

3 Case Study: Measuring Learning Transfer

To investigate:

① To what extent does learning transfer take place?
② What type of learners are likely to make the transfer?
③ How does the transfer manifest itself over time?



Approach

① Target: ***FP101x,*** a functional programming MOOC on edX
② Link FP101x learners to their **GitHub** accounts
③ Analyze learners' log traces on edX (during the 8 weeks of FP101x) and their coding activities on GitHub over a period 2.5 years (two years before and six months after FP101x)

Preliminary Results

① Only ***8%*** of learners displayed learning transfer.
② Confirming prior works, certain types of learners (e.g. the intrinsically motivated ones) are more likely to exhibit transfer.
③ The rate of transfer remained steady after the initial uptake.

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