

» Week 2: Diagnostic Metrics and Cross-Validation

» Week 3: Feature Engineering and Behavior Detection

» Week 4: Knowledge Inference and Knowledge Structures

Getting Started

Lectures

**CTAT Assignment Week 4**

Assignment due Aug 26, 2015 at 16:00 UTC



**Bazaar Assignment Week 4**

due Aug 26, 2015 at 16:00 UTC

**Week 4 General Discussion**

» Week 5: Relationship Mining

In this assignment, you need to build a Bayesian Knowledge Tracing model for data file [Asgn4-dataset.csv](#). This data set is a subset of the data set used in

Baker, R.S.J.d., Corbett, A.T., Roll, I., Koedinger, K.R. (2008) Developing a Generalizable Detector of When Students Game the System. User Modeling and User-Adapted Interaction, 18, 3, 287-314.

This paper can be found at <http://www.columbia.edu/~rsb2162/USER475.pdf>

This data set's variables are:

- ID – a unique ID for every student action in the Cognitive Tutor used
- Lesson – the tutor lesson the action comes from
- Student – a deidentified ID for the student
- KC – the knowledge component (skill) involved
- Item – the problem step in the learning system
- Right – is the student action right (1) or not right (0)
- Firstattempt – is this the student's first attempt at the problem step (1)?
- Time – how long did the student attempt take?

You should complete questions 1-9 of this assignment in Microsoft Excel, or a similar spreadsheet program. Question 10 should be completed using Java and BKT-BF, available at

<http://www.columbia.edu/~rsb2162/BKT-BruteForce.zip>

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WEEK 4 CTAT ACTIVITY (EXTERNAL RESOURCE) (1.0 points possible)