

AUTOMATED GRADING OF SHORT CONSTRUCTED RESPONSE QUESTIONS



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CONTENT

MOTIVATION

CONSTRUCTED RESPONSE

ALL ROADS...



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MOTIVATION

- Grading takes time
 - Less money for other things
 - Less time for tutoring and research
 - Quite boring
- Existing Univ. Helsinki systems (TMC, SQL-Trainer, Titotrainer) can not handle free text
- Diversifying the material is always good



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CONSTRUCTED RESPONSE

- “Not multiple choice”
- Huge range
 - “Write down missing word”
 - Essays
 - Mathematical proofs
- Scoring is non-trivial
 - Multiple correct answers
 - Multiple variations of multiple correct answers



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ALL ROADS...

- Many ways to analyze answers
 - Computational Linguistics
 - Keyword algorithms
 - Machine learning
- Unique problems?
 - Language
 - Rate of change for questions



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