

## State of Research

By: Mikhail Boulgakov, Silvia Gong, Lavanya Satyan

Advised by: Prof. McAuley

It is important for sellers on Amazon to quickly answer users' questions. To tackle this issue, we developed a model that automatically answer a user's yes/no question about an Amazon product using the information contained in the reviews for that product. We built upon Moqa, a framework that predicts the answer to a question using a bilinear regression between a bag of words representation of a review and a question.

Our specific goal was to improve the accuracy of the predicted answers by improving the measurement of the relevance of a review to the question. Improving the relevance helped us to determine which reviews contain the most useful and correct information, which allows us to answer the question as accurately as possible.

If we had more time, we would extend our model to predict answers to open-ended questions. We would also hand label and run our model on questions and reviews from categories other than the Tools and Home Improvement category. We would also use a more complex model for the voting function as opposed to a simple logistic regression.