

# 5<sup>TH</sup> WORLD MACHINE LEARNING AND DEEP LEARNING CONGRESS and WORLD CONGRESS ON COMPUTER SCIENCE, MACHINE LEARNING AND BIG DATA

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## Survival analysis within stack overflow: Python and R

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Online question and answer communities, particularly stack overflow, can serve as helpful resources for programming professionals and enthusiasts. However, users of such services inherently wary the life-time of a question once posed. In fact, the timeframe observed between the stages where one initially poses a question to the point where a response is accepted as a satisfactory answer is posted can vary greatly between programming languages. One logical approach to determining the nature of these responses has been to collect relevant data from stack overflow within a set time period and apply survival analysis principles as means of predicting response data related to the programming topics of R and Python. Utilizing a longitudinal design and exploring details such as event counts, time in hours till first response, time till accepted answer, resulted in neither language excelling in every area. Python demonstrated the best overall answer rate, whereas R demonstrated the best-accepted answer rate.

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