

ABSTRACT

Embodiments of the present disclosure include computer-implemented systems and methods for predicting a minimum detectable effect. The system may include at least one processor configured to execute instructions to perform steps. The steps may include sending a first webpage to a first user device and a second webpage to a second user device. The second webpage may include at least one characteristic different than the first website. The steps may include collecting user interaction data from the first and second user devices and determining a current minimum detectable effect of a user experience. The steps may include retrieving a set of historic minimum detectable effect values associated with an earlier period of time and determining a percentile rank of the current minimum detectable effect based on the retrieved set of historic minimum detectable effect values. The steps may include predicting a first and second future value of the minimum detectable effect of the user experience and aggregating the first and second future values. The aggregated first and second future value may be compared with a threshold to determine whether or not to stop an experiment and implement a change on a website.