: "Split Second Decision Making in the Field: Response Times in Mobile Advertising" (joint with Khai Chiong and Ryan Webb).

The abstract is:

We study how choice and response time data can be combined to estimate the effectiveness of manipulating attention to advertisements. We utilize the "drift-diffusion" model -- originally developed in psychology and neuroeconomics to jointly explain subjects' choices and response times in laboratory experiments --- to model users' responses to video advertisements on mobile devices.  The combination of response time with choice data allows separate identification of the diffusion processes characterizing users' preferences when the ad is playing, as well as when users face a subsequent decision to click-through on the ad.

     We use our estimates to address how a decision environment can be designed to attract attention: specifically, whether users should be permitted to skip part or all of an advertisement before making a choice.  Overall, we find that allowing users to skip the ad after ten seconds yields roughly the same revenue as forcing them to view the entire thirty-second ad, thus rationalizing the practice of some platforms (e.g. YouTube) where users can skip an ad after 5 or 10 seconds. However, the effects are very heterogeneous across users. Ad revenue can be higher if the ``skip-ability" of the ad could be targeted and individualized according to users' demographics.