## UNIVERSITY OF CALIFORNIA, SANTA BARBARA

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Re: Support Udit Paul and Jiamo Liu for Outstanding Publication Award

To whom it may concern, I am writing to strongly recommend Paul and Jiamo for the "Outstanding Publication Award". Paul has been an exceptional graduate student at UCSB, and his recent publication, "The Importance of Contextualization of Crowdsourced Active Speed Test Measurements," truly showcases his dedication, intelligence, and innovative thinking.

This paper received the **Distinguished Paper Award** at the prestigious ACM SIGCOMM Internet Measurements Conference (IMC) in 2022. It addresses a timely issue as crowdsourced speed test measurements, such as Ookla Speed Test, are increasingly being used for policy-related decision-making. This work demonstrates the importance of understanding the context of these measurements to avoid drawing misleading conclusions.

One of the key challenges in contextualizing these measurements is inferring a user's subscription plan (e.g., 10 Mbps vs. 100 Mbps). Paul and his team developed a novel methodology to infer the subscription tier for crowdsourced measurements, which they then applied to characterize skews in both public (FCC's MBA, Google's M-Lab) and private (Ookla) datasets. Their analysis reveals how the lack of context leads to inaccurate interpretations and provides a set of recommendations for speed test vendors and the Federal Communications Commission to contextualize speed test data and correctly assess measured performance.

As one of the reviewers aptly praised, "Attempt at solving a problem that has been long considered very hard – i.e., understanding speed test measurements within the context of service plans, at scale. The paper makes a solid attempt at trying to do so, by combining disparate datasets in ingenious ways. Insights into factors affecting speed test measurements are a good contribution as well." This quote embodies the significance and innovation of this work. The paper's recognition at the ACM SIGCOMM IMC 2022 is a testament to its importance and impact.

This effort has been massive undertakings. The two graduate students have been working on this project for more than two years now. It takes a lot of determination and perseverance to work on such a high-risk, high-reward project, especially given multiple setbacks during it early days. Given the eligibility criteria for the Outstanding Publication Award, I firmly believe that Paul and Jiamo are deserving candidates for this honor.

I appreciate your consideration of Paul and Jiamo for the "Outstanding Publication Award," and I am confident that their work will continue to make a significant impact in the field.

Sincerely

Arpit Gupta