

A few words about writing the review:

— Try to articulate the hypotheses crisply, but precisely. This is not easy because there is often a temptation to say something broad/vague, like: “The hypothesis of this paper is to show that WiFi signals can be used for localization”.

Yes, that true ... but that’s a high-level statement. Try to zoom in and get more technical.

A better one might be: “The hypothesis is that the power of the received WiFi signal is different across locations, and this power remains modestly stable over time. Hence, received power (RSSI) can be used as a location fingerprint”.

You can even break the hypothesis into sub-parts as follows: (1) Received power is a reasonably correlated to distance, (2) Each location is at different distances away from different WiFi access points, (3) Hence, the power vector can be used as a location fingerprint, (4) The fingerprints stay the same over time even through the environment is dynamic.

— Critique in a balanced way:

+ What is the most interesting observation or insight? why is this interesting? Is there anything surprising here?

- What are the tradeoffs in the paper? When will the approach break? Will the idea and assumptions hold in practice?

It’s good to always bear in mind that there is rarely a "free lunch" ... so solving one problem P typically produces another problem Q. A paper is good when P is a painful problem but Q is tolerable ... and hence, we are happy to trade P for Q. Try to identify P and Q in every paper.

— Discuss the main results and whether it verifies the original hypothesis. Question if the metrics are the appropriate ones. Any metric missing? Are the results good? Could the results be good not because the hypothesis is true, but because of something else influencing the system? Do the results cover the various scenarios?

— End with your personal opinion ... where do you see value in the paper ... where is there room for improvement. What would you have done to make this paper better?