2022-23

Currently there is nothing significant reported in any of the academic parameters.

There has been no publications for some time. If working on a *hard problem*, can TRs be published on intermediate results so that some external appraisal is possible?

May be worth talking to senior systems faculty in NCR to see how to make progress in attracting students and publish good quality research (as was done in the thesis). Also, may need mentoring on submitting proposals, etc.

Not sure whether the faculty member has filled up the form correctly as there is hardly any information.

Given that you have no publications, no funding is it not better to move to industry?

2021-22

Hardly anything is filled up, is it an oversight?

There are no publications either in journals or conferences not even in workshops. Two PhD students but if there are no publication record, how would the faculty really guide the PhD students to have publications. There is no funding history, nor any history of MTech thesis guidance or even BTP guidance. The service load seems to be rather light – and teaching evaluation score seems below average or at the best average. The faculty does not seem to be interested in the kind of activities required of a faculty in a research-based education institution. He might be better off in industry.

I suggest working or discussing with other systems faculty (such as Prof. Arkaprava Basu at IISc or Prof. Purushottam Kulkarni at IITB) to get some new things off the ground. They may also suggest how to get going with companies like AMD. Or, Dr. Aravinda Prasad at Intel Research…

2020-21

Given the dislocations caused by COVID, it is difficult to do experimental work of the kind this faculty member undertakes, especially done along with students. However, given a good network and remote mgmt. of servers, this should not be seriously problematic. But I am not clear about the difficulties faced in this instance.
Or, maybe even work with only locally available hardware. For example, a good ideational problem could be binary tracing of Android apps in the context of various "anti-tracing" techniques employed.
Concentrate on publication and funding. Also large class teaching is desirable.

The publication record is not satisfactory at all – and in order to stay in a faculty position this needs to improve drastically. The only publication seems to be in 2019 which might have been some work done before joining. What about the work with MTech student?

The faculty needs to take publication (both journal and good conferences) very seriously. Otherwise, keeping the faculty job will quickly become impossible.

Funding is also an essential component of faculty research – without funding – setting up equipment, buying software, or paying subscription to various societies like IEEE/ACM – and finally to have long term employees in the lab (research engineers – who can take student work and integrate and build more comprehensive software) – all these become impossible – and in systems area – the sustainability becomes a problem.

2019-20
I think he has just started, too early to comment. But he should surely try to hire PhD students. Also I guess as he takes more large classes, he will improve.
While the faculty member has done credible work in the past and after joining IIIT (in collaboration with MSR, for eg), work with IIIT students is not seen. Maybe lack of good students, etc is an issue but this has to be addressed. (I notice that the OS class is *very* large while the compiler (research?) class is *very* small.) One suggestion would be to consider writing a survey or monograph by oneself and possibly chart new directions as a result of careful thinking while writing it. Doing good systems research is not that easy, so there is a need for a fallback. For example, why not think about privacy, etc in the context of microservices (and 5G-like technologies in general) from a "compiler" pov?
It is a bit too early to evaluate as the faculty member has been on the faculty only for 1.5 years of which half a year is wasted due to lockdown and other issues. The faculty member published two papers which seem to be from his PhD days. No new publication but that is understandable. However, getting a steady pipeline of publications will be important in the next 3-4 years.
Strong efforts should be put into getting some PhD and MTech thesis students as the area of research is experiment intensive and will require a lot of development. Sticking to pure O/S topics may not attract funding and even publication will be harder. Diversifying in areas like secure kernel, Seccom, SE Linux and associated security issues may pay off as there are not many experts in the country in these. Also, other areas such as virtualization, secure VM etc considering performance security pay off, docker security etc might help.

Applying for research funding especially from the private industry such as Microsoft, IBM, VMWare etc may be tried as those would have a better opportunity than DST/SERB as the selection processes there now has become Russian Roulette. Establishing collaboration inside and outside departments (IIT

Delhi etc) might also be a good idea. Research in systems is always very collaborative in nature, and lone warriors do not have much success. Taking on roles such as placement coordinator so early in career should be discouraged. Leave those for senior established faculty and junior faculty should first establish their research group and reputation before getting into administrative duties.

2018-19

Research work is excellent but so far extra-mural. Nurturing students is something to be attempted in the earnest going forward. Working with industry (MSR so far) also needs attention. May be appropriate to request smaller classes or more advanced classes to further research work.

Publications are needed for staying in an academic career. The publication activity must start right away. Funding must be tried in all earnest so that one has ability to hire engineers and students to boost research activities – especially in systems area. The average teaching evaluation is also quite low it seems – it seems better efforts need to be made – possibly consulting other teachers who are well known for doing well on evaluation score – it is often something to be learnt from seniors with great teaching records.

While the EuroSys paper is great, it would help to go after more PL conferences since even the ConfLLVM paper is PL centric. For some reason I don't your FAST paper of 2019 in the list you submitted which is also a very good conferences. It's not clear whether you will focus on systems research (as evidenced by your earlier SOSP and VEE papers) or whether you will shift base to PL. Suggested is you have a concrete plan for this. In addition, I hope you have some funding proposals in the pipeline. I am also concerned about the teaching evaluations that appear far lower than what you can deliver. Perhaps co-teach a couple of courses with others in this space.