

Letter of Recommendation

October 18, 2021

It is my pleasure to recommend Karri Sree Hari for the graduate course in Computer Science at your prestigious university. I have had the opportunity to observe Hari closely from various perspectives – as my student, research student and thesis project evaluator over a period of 3 semesters. He stood out as an extremely intuitive and capable student. I am happy to hear that he wants to pursue a career in this field and is working accordingly to achieve his goal.

I have known Hari since his 6th semester when I taught him a course on Computer Network Security followed by a course on Information Security the following semester. Hari was a top student of my class both in terms of his grade in the course and qualities that he possesses beyond the transcript. He would be zealous in taking up practical network attack simulations and went the extra mile to stay up to date in the world of attacks on corporations and breaches of networks. Hari was specially interested in the social engineering aspects of many case studies, such as those of breaches using stuxnet in Iran's nuclear facility and Target along with the technicalities.

I agreed to guide Hari due to his enthusiasm and analytical skills. He worked on an approach to secure wireless Internet of Things (IoT) Networks without increasing the cost of IoT systems, majorly changing network topology or adversely affecting any other unique selling points of IoT. This was achieved by clustering microcontrollers in physical proximity to use a single device for connecting to the edge device. This link was secured using an efficient tunnelling protocol for all communication. This approach was built for and tested on an automated classroom setup and was successful in preventing packet sniffing and external control of the devices which could make them a part of a botnet. This approach required no changes in the existent IoT architecture and only minor changes in the network topology. The research resulted in a paper presented at the International Conference on Communication, Computing and Electronics Systems in Coimbatore, India and published in the Springer Lecture Notes in Electrical Engineering series. Hari's quirky and out of the box thinking was seen when the team had to solve issues with hardware. He was able to overcome tunnel vision by repeated swapping of work between team members that led to quick resolution to the problems that arose. He proved to be capable of delegating work that maximised each team member's skills and working in a dynamic environment.

I am of the opinion that Hari is prepared for graduate school on account of his proven persistence, resilience, and analytical ability. His industrial experience which involved building end to end applications has given him a better idea about the practical aspects of Computer Science and will aid his ability to fulfil the requirements for graduate school. With great conviction I can recommend that Hari would be an excellent fit for your graduate cohort.

Prof. H B Prasad

Director, Centre for Information Security, Forensics and Cyber Resilience
PES University

Bangalore, India

Additional Points

- Hari's observational skills and awareness was seen when he was able to detect a security flaw in one of the lab's entrances where the fingerprint lock would shut off in case of a power failure and the door would unlock.
- Hari is an extremely efficient organizer when it comes to events and is a talented beatboxer who can entertain crowds. He stood first in the talent show held in the department.