# **EVALUATIONS**:

How long have you known the applicant: 2-3 years How do you know the applicant: Project Mentor

PROVIDE YOUR OVERALL RECOMMENDATION FOR THIS APPLICANT. Highest

### Letter of Recommendation

October 28, 2021

I am pleased to recommend Karri Sree Hari for his graduate studies in Computer Science at your esteemed university. I was the guide for his undergraduate thesis project and have been associated with him for over a year. Hari is an enthusiastic student with a strong interest in solving real-time problems.

Hari approached with an idea for community detection on twitter in his final semester. Being a student who had no prior experience with NLP, he took it upon himself to implement the stance detection algorithm and was surprised with the short amount of time it took him to get up to speed with the intricacies of the subject. He made use of all the resources available and studied the course material in order to unblock himself. When faced with a multitude of questions regarding the scope of this project, Hari was able to quickly turn it into one that had a practical use case. Hari was always meticulous with his preparation regarding presentations and always took the lead in explaining scenarios that were questioned. He was successful in implementing a novel method of bias detection that would classify twitter user accounts as bots that are pretending to be users. Hari single handedly handled all the documentation and paper writing which led to the submission of the draft to various conferences before deadline stress. This study was published in the Emerging Technologies in Data Mining and Information Security journal and was very well received by the panel members.

Hari was part of a full time internship and worked on the project simultaneously during his final semester. The project was one of the first ones to get accepted in the International Conference on Emerging Technologies in Data Mining and Information Security. Hari is extremely intuitive and loves picking up projects based on his interest as he was one of the only students who had chosen a domain that he was completely unfamiliar with and was still able to deliver an exceptional result. He displayed exceptional time management skills and was always a step ahead in submitting reports and creating drafts of the paper.

Hari was also very active in volunteering his time towards the university's co-curricular activities. He was part of the Microsoft Innovation Lab for over 3 years and the student head for a period of two years. He has organized various events and always ensured that he managed his course work alongside his contributions to the club. Hari is a talented Beatboxer and has won accolades for the same in college fests. He is very enthusiastic about his endeavours be it in academics or beyond. I would place Hari in the top 5% of his batch academically and put him in the top 2% overall. Given his excellent work ethic, motivation, and desire to excel, I have no doubt he will excel in your program. I recommend him without any reservation. Please feel free to contact me regarding any additional questions.

Bhaskarjyoti Das Professor, Computer Science and Engineering PES University Bangalore, India

# **EVALUATIONS**:

How long have you known the applicant: 4 years How do you know the applicant: Professor

PROVIDE YOUR OVERALL RECOMMENDATION FOR THIS APPLICANT. Highest

### 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.

# **EVALUATIONS**:

How long have you known the applicant: 2 years How do you know the applicant: Manager

PROVIDE YOUR OVERALL RECOMMENDATION FOR THIS APPLICANT. Strong

## **Letter of Recommendation**

November 21, 2021

It gives me immense pleasure to recommend Karri Sree Hari for graduate studies in Computer Science at your prestigious university. I am the chairperson of the Computer Science and Engineering department and have observed Hari from different perspectives, as a student, research student and event organizer.

I have known Hari since his 3rd semester when I taught his a course on Data Structures. The course covered topics ranging from the basics of abstract data types to advanced topics like Tries and Hashing. 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. In class, he was an active listener and he always participated in discussions. He took on every assignment, even the optional ones, in stride and saw to their timely completion.

As his thesis project evaluator I was impressed by the detail and preparedness of his demos and presentations. His project involved detection of bias in a set of tweets regarding a certain topic. It started out as a community detection algorithm but transformed iteratively into a use case that was experimented on real time data. He was able to overcome the initial ambiguity with the problem statement in a very short span of time and made excellent use of the feedback to deliver a clear goal at the following presentation. Hari was extremely enthusiastic about improving the accuracy of the stance detection and procured data from Professors in the University of Houston to train his model better. The results were accurate in terms of showing how specific accounts brought bias into the community. These findings were published in the Emerging Technologies in Data Mining and Information Security journal.

Hari was also very active in volunteering his time towards the university's co-curricular activities.

He has assumed several leadership roles while organizing multiple events. Hari has excellent communication skills which were seen first hand when he had to organise events and host panel evaluators during the annual exhibition, Prakalpa. Hari is extremely talented as he is one of the only people in the college who has mastered beatboxing and won prizes in events.

Hari has continued to work on his interests alongside his industry experience. He is very enthusiastic about his endeavours be it in academics or beyond. I would place Hari in the top 25% of his batch academically and put him in the top 5% overall. Given his excellent work ethic, motivation, and desire to excel, I have no doubt he will excel in your program. I recommend him without any reservation. Please feel free to contact me regarding any additional questions.

Dr. Shylaja S S Chairperson, Computer Science and Engineering PES University Bangalore, India https://staff.pes.edu/nm1297