

Divisions*Artificial Intelligence Division**Computational Systems and Technology**Informatics Systems Research**MOSIS**Networking and Cybersecurity Division*

June 17, 2024

To Whom It May Concern:

It is with great pleasure that I write this letter to recommend Rishit Saiya as a very strong research student I had under my supervision. Rishit worked with my research lab (STEEL at USC-ISI), which focuses on cybersecurity research, during September 2022 up until May 2024. Rishit was at the time completing his masters degree at USC. He worked on multiple research projects during this tenure. Rishit first volunteered his work on the Puppeteer project, which focused on scambaiting. The goal of the project was to develop an automated bot, which uses large language models to engage with the scammers, to learn about their identity and to tie up their resources. Rishit helped collect data from human user studies to evaluate the bot's effectiveness and he was instrumental in devising the performance metrics. Rishit is a co-author on this project's submission to HICSS 2025. After Puppeteer, he got a paid, lead researcher role on the DISCERN project, which collects data on how legitimate and malicious users may use a research testbed. Rishit was responsible for developing cybersecurity experiments in the new MergeTB testbed, which subvert a testbed machine and join it into an external botnet. He started with BYOB (Build Your Own Botnet) open source code and extended it with several new malicious behaviors. He also automated the BYOB installation and data collection. We are currently collecting data for a publication from the DISCERN project.

Rishit has been very productive and self-driven for a masters student, and has greatly contributed to our lab. He consistently demonstrated excellent cooperation and collaboration skills, successfully contributing to group tasks and working seamlessly with colleagues. His extraordinary communication abilities, both written and verbal, allowed him to express complex ideas with clarity and precision. His response to problems was creative and innovative, demonstrating critical thinking and problem-solving skills during the entire course of research. His adaptability and flexibility enabled him to thrive in a variety of contexts, and his strong time management ensured that deadlines were consistently met. Furthermore, he maintained high ethical standards and integrity throughout his career and relationships. His coding skills were very strong and his code was very well documented and easily deployable. He was very motivated and self-driven, reporting regularly on progress and initiating meetings. He contributed significant research components to our Puppeteer and DISCERN projects, which led to co-authorship on one current and one future publication. Rishit was also very generous with his time and volunteered often to help with various research and non-research tasks, such as co-presenting posters about other lab work at various venues. He was very open to new materials and quick to learn them, and would make an excellent researcher, were he to continue to a PhD degree.

Rishit's lasting interest and involvement in cybersecurity made him an ideal candidate to receive student grants from various prestigious security-focused conferences. Rishit was a recipient of student grants from conferences such as IEEE SecDev 2022, NSF MERIF 2023,



ACM SIGCOMM 2023 and NDSS 2024. These networking opportunities helped him meet other researchers and spread the word about the work we do in our lab.

I strongly recommend Rishit to any open research or employment opportunity, and I am looking forward to learn about his future successes.

Best regards,

A handwritten signature in black ink, consisting of the letters 'JM' in a stylized, cursive font.

Jelena Mirkovic
Principal Scientist, USC Information Sciences Institute
Research Associate Professor
Thomas Lord Department of Computer Science
University of Southern California
PI for the SPHERE project (<https://sphere-project.net>)