

To Whom It May Concern,

I am pleased to recommend Jamal Tannous, who worked under my supervision on the project titled ["Vulnerabilities in IPv6"](#).

This project provided a platform for Jamal to showcase his exceptional approach to problem-solving, hunger for theoretical knowledge, and dedication to deep exploration of emerging fields.

Jamal's work targeted a range of IPv6 challenges, including **TCP SYN Flood and SYN Cookies, weaknesses in IPv6's Neighbor Discovery Protocol (NDP), MITM attacks using spoofed ICMPv6 Router Advertisements, and security issues in Duplicate Address Detection (DAD)**. He also delved into more specialized areas, such as **Copypcat Attacks in IPv6-Based Low Power and Lossy Networks** and **IPvSeeYou, which exploits leaked identifiers in IPv6 for street-level geolocation**.

A standout aspect of his work was his simulation of **Copypcat Attacks in IPv6-Based Low Power and Lossy Networks**. Using C++, he modeled a **Destination Oriented Directed Acyclic Graph (DODAG)** network of embedded devices, enabling him to simulate these attacks and evaluate mitigation strategies. This endeavor exemplified his ability to apply theoretical knowledge to practical scenarios while pursuing a deeper understanding of the underlying mechanisms.

Jamal's dedication to thorough analysis, his systematic methodology, and his eagerness to explore complex and unfamiliar topics were evident throughout the project. His contributions extended beyond technical solutions, reflecting a genuine enthusiasm for learning and a commitment to tackling intellectual challenges.

Jamal's unique approach to research and problem-solving makes him a valuable asset to any organization or academic institution. I am confident he will continue to excel in any endeavor that allows him to explore and innovate.

Should you require further details about Jamal's work or achievements, please feel free to contact me.

Sincerely,

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