



February 22, 2024

To Whom It May Concern,

I am composing this letter in support of Seyed Mohammad Hossein Hosseini's visa application, specifically to provide details regarding his Study Research Plan. Mr. Hosseini is an incoming Ph.D. student in the Computer Science Department at the University of Colorado, Boulder, where I hold the position of Associate Professor and will act as his advisor. Below, I address the four pieces of information requested in this document.

Describe the goals of your research, as well as any practical applications:

Mr. Hosseini's research will primarily focus on enhancing video streaming systems and technologies, with a specific emphasis on the Converge project. The Converge project introduces a novel architecture aimed at improving video conferencing over multipath networks. Video streaming has attained widespread use across various domains such as online education, video conferencing, live sports, online gaming, and content sharing. However, delivering high-quality video with minimal latency over mobile networks poses persistent challenges due to fluctuating bandwidth and intermittent connectivity. Mr. Hosseini intends to investigate techniques such as adaptive bitrate streaming, forward error correction, and content replication to address these challenges. The practical implications of his research include facilitating responsive real-time interactive video experiences on mobile devices.

Identify the lab or center where the research will be conducted and describe what he will be able to access in that lab:

Mr. Hosseini will be affiliated with the Internet Systems Lab at the University of Colorado Boulder. This lab serves as the research home for 10 faculty members and 40 Ph.D. students, all situated within a co-located facility. Within this environment, Mr. Hosseini will have access to dedicated desk space, computing resources, and the opportunity to engage with a vibrant community of researchers for idea exchange and potential collaboration.

State sources and amounts of any U.S. government money (or funding from U.S. corporations assisting the U.S. government) to be used to support that research: Regarding funding specifics, the I-20 form indicates a total amount of \$66,107 per year for Teaching and Research Assistantships. This assistantship is sponsored by the Computer Science Department.

Describe any export-controlled technologies and/or information that will be shared with him:

Research conducted within my lab adheres to a policy of openness, with findings disseminated through open-access, peer-reviewed journals, and conferences. We do not engage in research involving classified, confidential, or military-relevant technologies. Consequently, Mr. Hosseini will not be exposed to any form of restricted or confidential technology or information, as such materials are not within the purview of the Department of Computer Science at the University of Colorado Boulder. His research focus will primarily center on open-source and publicly available video codecs and software systems.

Please do not hesitate to reach out if further information is required.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Sangtae Ha', with a stylized flourish at the end.

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