

Multimedia & Wireless Networks Research Group

One Postdoctoral, one visiting scholar, four Ph.D. and 10 MS thesis students are currently doing their research in this group.

- Postdoctoral, Visiting or Exchange Scholar Research Positions

- **Wireless Network Researcher:**

QoS-aware and cross-layer routing and MAC protocols for MANETS, including dynamic spectrum access (i.e., cognitive radio nets). The protocols would consider real-time video transmission over MANETS.

Qualifications: Candidate should have a Ph.D. (or a senior Ph.D. student) with experience in designing cross-layer and QoS-aware protocols for wireless ad hoc and cognitive radio networks. Proficiency in C/C++ is a must and experience with ns-2/Opnet is a plus. The position is available for 1 year with strong possibility for extension.

- **Robust Multimedia Compression Researcher:**

* Design of Error Resiliency and Smart Packetization schemes to support real-time transmission of H.264/AVC and SVC compressed Video bitstream over multi-hop ad hoc wireless networks.

* Consideration of Physical layer issues for video transmission and interaction with network protocols.

* These schemes will require optimization of various competing factors for real-time video transmission.

Qualifications: Candidate should have a Ph.D. (or a senior Ph.D. student) with experience in robust H.264/AVC video compression schemes for wireless networks, and knowledge of digital communication and wireless networks. Proficiency in C/C++ and Matlab is a must, and experience with ns-2/Opnet is a plus. The position is available for 1 year with strong possibility for extension.

- Ph.D. Students

Prospective students can apply to one of the following two joint doctoral programs:

- *Ph.D. in Engineering* jointly offered with College of Engineering at University of California, San Diego. More information at: <http://www.engineering.sdsu.edu/main/jdp.htm#>.
- Ph.D. in Computational Science jointly offered with Claremont Graduate University. More information at: <http://www.csrc.sdsu.edu/csrc/programs/phd.php>

The tuition waiver and financial assistance is available for the promising students

- **M.S. Students**

Thesis topics related to QoS-aware and cross-layer wireless protocols and robust multimedia compression are available to promising students with a GPA above 3.5 and strong background in the area of thesis research. Financial assistance may be given to promising students.

To see the list of my current and previous students, please visit my web page.