

Researchers develop cloud computing based disaster management system

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(PhysOrg.com) -- Juan Li, assistant professor of computer science, and Samee U. Khan, assistant professor of electrical and computer engineering, have developed an elaborate cloud computing based disaster management system.

“Natural and manmade disasters require an effective and efficient management of massive amounts of data and coordination of wide varieties of people and organizations. This is where our system comes into play,” Li said.

The system core is a web-based social network server that provides a platform to enable users (workers, first-responders, local disaster related non-profit organizations, volunteers and local residents) to access information, communicate and collaborate, in real-time from all types of computing devices, including mobile handheld devices, such as smart phones, PDAs and iPads.

“Our system provides a community-based, effective and self-scalable [cloud computing](#) environment in which a diverse set of organizations and personnel can contribute their resources, such as data, knowledge, storage and computing platform to the cloud,” Li said. “In this way, local communities, institutions/organizations and individuals can seamlessly interact with each other to achieve massive collaboration within the affected area.”

Khan said the motivation to develop the system was to enable all of the

local Fargo-Moorhead area residents to become first-responders by providing firsthand, valuable, and timely information to the local, state and federal governments, if a calamity, such as the 2009 flood ever happened again. Khan witnessed massive destruction due to floods in his native country, Pakistan, and he wants the local community to have all of the tools available to them to fight such natural disasters.

Provided by North Dakota State University

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