

Wenwen Li

This project will develop new education materials that emphasize the service-orientation aspect of cyberGIScience. Service-orientation has become increasingly important in the architecture design of cyberGIS application systems because spatial data access and analysis need to be transformed from the conventional single-desktop environment to a web-based, service-oriented, cloud-computing platform to overcome major performance bottleneck. This new course, entitled "Introduction to Service-Oriented cyberGIScience," consists of three parts. The first introduces the concepts and principles of cyberGIS. The second introduces the advanced methodology and techniques that support the development of a cyberGIS product. The third part is to tour students with real-world cyberGIS applications to broaden their horizon. Two essential abilities for future GIS students including spatial thinking and computational thinking will be trained in an integrated manner through a combined lecture and hands-on sessions. This new course will be offered as an upper-level undergraduate course at ASU.

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