Course Title: Mobile Cloud Computing

Course Description

Introduction to the basic concepts of mobile cloud computing, including: 1. The mobile computing technology used in modern smart phones; 2. The cloud computing technologies used in existing data centers; 3. The synergy of mobile and cloud computing and its applications; 4. Programming on smart phone utilizing data center services. Students will gain knowledge of: the fundamental principles of mobile cloud computing, the major technologies that support mobile cloud computing, the current challenges and primary areas of research within the field of mobile cloud computing, and a basic understanding of the role of mobile cloud computing in the context of the everyday living.

Prerequisites: ESE 224 or CSE230 or CSE 214 or ISE 208.

Spring 2018

Stony Brook University

Department of Electrical & Computer Engineering

College of Engineering and Applied Sciences

Course Title: Mobile Cloud Computing

Course Instructor: Prof. Shan Lin

Instructor and Office Hours

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Time: Tue. 4-7 PM

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Textbook and Reading

Raj Kamal. Mobile Computing. Oxford University Press. 2007.

Frank H. P. Fitzek, Marcos D. Katz . Mobile Clouds: Exploiting Distributed Resources in Wireless, Mobile and Social Networks. Wiley Press. 2013.

Other readings for this course will be in the form of research papers, which will be distributed to students online.

Grading

Your grade will be based on attendance, programming assignments, a midterm exam, and the final project.

Labs	20%
Programming assignments	20%
Midterm exam	20%
Final project	40%

Undergrad and graduate will be evaluated with different standards on midterm exam, lab assignment, and final project. For graduate, there will be 2-3 extra questions in midterm exam, and one extra task in each programming assignment. As to the final project, graduate student needs to complete a system with both mobile and cloud computing elements and demonstrate their interactions. Undergrads don't need to design specifically for the mobile and cloud computing tradeoffs.

Disability

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, 128 ECC Building (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following web site: http://www.ehs.sunysb.edu and search Fire Safety and Evacuation and Disabilities.