

Attn: Computer Science & Informatics Students

Mobile Application Development Summer 2018

CSCI-C 490, CSCI-C 690, INFO-I 400

Instructor: Dr. Liqiang Zhang, (liqzhang@iu.edu)

Prereq: INFO-I 308 or CSCI-C 243 or CSCI-A 594

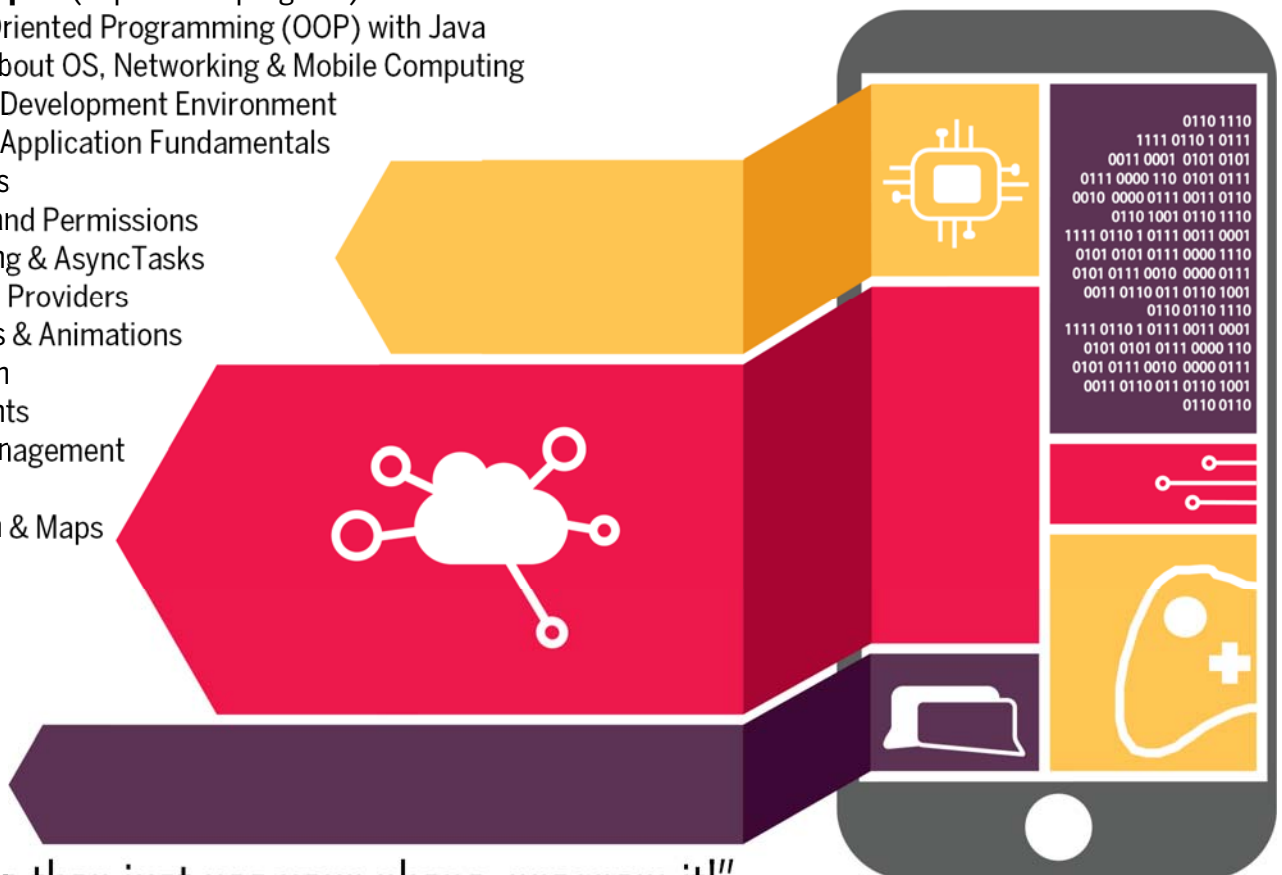
When: Monday & Wednesday 8:30-11:40a

Course Description: Pervasive computing with mobile devices is fast evolving as one of the major computing paradigms. Every day, billions of people access and interact with computing services through thousands of applications tailored for these mobile devices. The demand for mobile application development skills is therefore growing at a rapid pace.

This course will cover fundamental programming principles, software architecture and user experience considerations underlying mobile applications and their development environments. The course will focus on the **Android** platform. This will be a **very hands-on** course where the students should learn to write fairly sophisticated applications on mobile devices. The course will culminate in a presentation/demo session where students will demonstrate their mobile application to the class.

Tentative topics (depends on progress):

- ◇ Object Oriented Programming (OOP) with Java
- ◇ Basics about OS, Networking & Mobile Computing
- ◇ Android Development Environment
- ◇ Android Application Fundamentals
- ◇ Activities
- ◇ Intents and Permissions
- ◇ Threading & AsyncTasks
- ◇ Content Providers
- ◇ Graphics & Animations
- ◇ UI design
- ◇ Fragments
- ◇ Data Management
- ◇ Sensors
- ◇ Location & Maps
- ◇ Services



“Do more than just use your phone, program it!”