

CIS-6931 Special Topics - Advanced Topics in Information Processing

Catalog Description

Selected special topics in information processing. (3 credits.)

Prerequisites

Permission of the instructor.

Type

Advanced graduate course

Course Objectives

Awareness of frontiers of the current science of Information Processing.

Learn how to read, present and analyze conference style paper.

Identify and define a problem related to a predefined research topic.

Write a conference style paper.

Topics

Topic change annually. A recent offering of this course included the following topics.

- ALM (Application Life-circle Management) in Modern Practical Software Engineering
Case Study: Team System for TerraFly development.
- Rich Internet Application #1: Flash + Internet-based API
Case Study: TerraFly API.
- Rich Internet Application #2: AJAX Application
Case Study: TerraFly Realtor + Water
- Mobile Application development
Case Study: TerraFly Android, Window Mobile, iPhone Map application.
- Social Network Application
Case Study: TerraFly Social network application for Realtors.
- Large volume/High performance Spatial Map Engine
Case Study: TerraFly Map Engine. Storage, index, Query,
- Large volume/High performance Spatial Raster Engine
Case Study: TerraFly Imagery Engine. Storage, index, Query
- High Availability system
Case Study: TerraFly Network load balance, Auto-Fail over, Monitoring, backup, Hyper-V tech.
- Spatial Data Processing
Case Study: STREE, Property Analysis project, data merging
- Spatial Data Processing
Case Study: Spatial Keyword Search Engine (SKS)
- Building a High quality application
Case Study: TerraFly Quality Assurance
- Build N-Ties Architecture and Design pattern
Case Study: TerraFly architecture.

- Software configuration management: Source code version, promotion strategy and release management
Case Study: Terrafly Team development
- High quality coding
Case Study: coding in Terrafly Projects
- Building Fast Web application: N-tie Architecture, MVC & design pattern, ASP.Net, PHP, JSP
Case Study: TerraFly Social Realtor, budget Survey Projects etc.

Textbook

Research papers to be distributed

Last Update

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