

CS 498/IS 495

With Chris Urban

Course Description

This is primarily a project-oriented course. The course is designed to give senior-year students an opportunity to develop and manage a CS or an IS project. Ideally, students shall draw upon their previous coursework to complete the project. Students should use their “personal network of contacts” to find a real-world project in the public or private sector; students will complete these projects with little supervision from me. Project management by each student is an integral part of the course experience. A project proposal that includes scope, milestones and deliverables is developed at the beginning of the course. Progress reports and a final oral and written presentation will complete the capstone course experience. Students are evaluated by their project deliverables.

Requirements

Time Requirements: Each student should spend 60 – 90 hours during the semester on the capstone.

Log: Each student must develop and maintain a log of the time spent on their capstone project.

Meeting With Me: A timetable shall be established with me to periodically meet with me to discuss your project (every two weeks is good).

Project Proposal: Each student shall submit project proposal that includes scope, milestones and deliverables. This proposal is due to me via e-mail no later than noon on Thursday, February 15, 2018. I will reply (approve/disapprove) project proposals by 5 PM on Friday, February 16, 2018. Disapproved projects must be resubmitted by Friday, February 23, 2018.

Project Submission Format: Each student shall write a paper that is approximately 10 - 15 pages in length; this paper is due no later than Wednesday, April 25, 2018. The Project Submission Format shall include the following items. Note: some projects may not require all the items listed below and some project may require other items. If source-code is part of the

projects, that source code should be included as an Appendix. Note: a source-code appendix does not contribute to the 10 - 15 page length of the paper.

PRELIMINARIES

Title Page

Executive Summary / Abstract

Table of Contents

List of Figures, List of Tables, List of Notations

CHAPTER I

Introduction

Project Context

Purpose and Description

Objective of the Project

Scope and Limitations

CHAPTER II

Review of Related Literature

CHAPTER III

Methodology

Project Plan

Data Gathering Procedures

Source of Data

Software Model/ Paradigm

CHAPTER IV

Results and Discussion

Requirements Analysis

Requirements Documentation

Design of Software, Product, and Process

Development and Testing

Description of the Prototype

Implementation Plan

Implementation Results

CHAPTER V

Summary, Conclusion and Recommendations

Summary

Conclusions and Recommendations

APPENDICES

Only Relevant Source Code

Evaluation Tool or Test Documents

Sample input/output/reports

User Guide

Process/Data/Information Flow of the Project

One-Page Resume

Project Presentation: Each student shall develop and deliver a 10-minute presentation for their project; this presentation shall utilize PowerPoint slides. All presentations are tentatively scheduled for Friday, April 27, 2018.

E-Mail Communication With Me: All e-mail communications with me for the capstone course shall use this subject line: **CAPSTONE / Spring 18 / XXXXXX YYYYYYY** (replace the X's at left with your first name and replace the Y's with your last name).