CSIT 265 CSIT Capstone

3 Credits

Community College of Baltimore County Common Course Outline

Description

CSIT 265 – CSIT Capstone: is a project-based course in Computer Science and Information Technology in which students demonstrate technology proficiency related to their degree program using research methodologies and design principles. Students conduct original research or engage in project implementation around real world issues. Topics relate to artificial intelligence, data science, data analytics, or other computer related domains.

Pre-requisites: CSIT 211 or permission of the program director

Overall Course Objectives

Upon completion of this course, students will be able to:

- 1. develop a semester-long project related to a topic relevant to the course;
- 2. acquire data about a real world issue or application;
- 3. evaluate connections between various technological domains and the impact in real world applications;
- 4. investigate methods to apply technological design to solve problems;
- 5. recognize limitations in their own research and technological designs;
- 6. apply skills from data science, data analytics, artificial intelligence, or other computer related domains to implement a real world project;
- 7. critique other resources such as projects, research, or designs;
- 8. conduct scholarly research;
- 9. present appropriate analysis and conclusions in written or oral form;
- 10. demonstrate organizational skills, time management, and the ability to document findings;
- 11. demonstrate the ability to work and collaborate with others;
- 12. discuss ethical implications of research; and
- 13. synthesize appropriate perspectives from various computer related fields for the project or technological design.

Major Topics

- I. Data acquisition as part of the research process
- II. Conducting scholarly research
- III. Research methodologies
- IV. Create documentation for technical fields
- V. Ethical considerations in research and design
- VI. Critique research and technical designs
- VII. Synthesize topics or techniques from multiple computer related domains
- VIII. Presenting scholarly work

The Common Course Outline (CCO) determines the essential nature of each course. For more information, see your professor's syllabus.

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Four assignments
- Four reports throughout the development of the capstone project
- Formal written report of the findings of the capstone project
- Presentation of the capstone project

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

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