CS 395: Introduction to Internet of Things

Spring 2021

Contact Information

Student Facilitators:

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Faculty Advisor/Instructor of record:

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Office hours: See Blackboard

Course Description

CS 395: Student Initiated Special Topics are 1-credit courses that cover special and emerging topics of interest to computer science undergraduates. Lectures are guided by student facilitators under faculty advisement.

In this initial offering of CS 395 on Introduction to Internet of Things (IOT), students will learn in-depth the current and possible future uses and trends for IOT devices. This includes the current devices available for consumption, the problems that has risen from the development of IOT, and the differentiation between the types of devices currently used. Students will learn these concepts through projects, weekly assignments, lecture, assigned readings, and other supplementary material. Students will also learn the technical aspects of IOT devices.

This is a 10 week course.

Course Outcomes

Upon completion of this course, students should have:

- Knowledge of the history of IOT devices as well as current applications
- Conceptually understand the underlying problems and weaknesses that IOT devices posses
- Conceptually understand the different types of IOT devices and what makes them different from each other
- Demonstrate an understanding of basic IOT implementation by completing the final project
- Demonstrate understanding of the topics covered in this course by working on a project

Prerequisite

Grade of C or better in CS 310 and CS 367

Textbook

No textbook will be required. Assigned readings will be shared with the students or will be available online or through the library.

Grading Policy

Weekly Assignments	40%
Projects (2 projects; weighted equally)	60%

Students will be expected to complete several weekly assignments including but not limited to article readings, quizzes, short essays, discussions board posts, etc. Two projects will be assigned during the course of the semester.

Honor Code

All students are expected to abide by the <u>GMU Honor Code</u> and the <u>CS Department Honor Code</u>. This policy is rigorously enforced. All class-related assignments are considered individual efforts unless explicitly expressed otherwise (in writing). Review the university honor code and present any questions regarding the policies to instructor. Cheating on any assignment will be prosecuted and result in a notification of the Honor Committee as outlined in the GMU Honor Code.

Disability Accommodations

Students with a learning disability or other condition (documented with <u>GMU Office of Disability</u> <u>Services</u>) that may impact academic performance should speak with the instructor of record ASAP to discuss accommodations.