CISE Summer Project Internship

Class Periods: Tue and Thu 3-4pm
Location: CSE / E301J (conference room)
Academic Term: Summer 2019

Supervisor: Dr. Sartaj Sahni  Supervisor’s Email: sahni@cise.ufl.edu
Instructor: Dr. Mark Schmalz  Instructor’s Email: mssz@cise.ufl.edu

Office Hours: TBA

Peer Mentors: None, this semester, due to small size of class

Course Description: An upper-division level software project design and implementation course designed to prepare students for independent or group work in a project-oriented setting. Prior educational and experiential knowledge will be integrated in a capstone-course environment. Project development teams will utilize multidisciplinary approaches, project management, written and oral communication skills in creating one or more software systems that can be of benefit to society.

Course Pre-Requisites / Co-Requisites: Approval of Course Supervisor and Instructor.

Course Goals: (i) Understand and practice human-centered engineering design process for a project of technical and/or societal merit; (ii) Learn techniques to solve open-ended engineering challenges; (iii) Promote a culture of creativity by introducing design, modeling, programming, test, analysis, and other techniques; (iv) Build teamwork and cooperative learning skills through participation in multidisciplinary teams and active engineering project management; (v) Build professional skills in background research & written, pictorial, and oral communication methods; (vi) Raise awareness of ethics and contemporary issues in engineering design related to a global society; (vii) Introduce engineering students to the various engineering majors and their roles within society; and (viii) Inform students of opportunities for experiential learning related to their majors throughout the College of Engineering and UF community.

Materials and Supply Fees: None.

Required Textbooks and Software: None: All software and supporting papers provided online.

Relation to Program Outcomes (ABET): All ABET outcomes supported.

Course Schedule (6-weeks summer format):

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<tr>
<th>Week</th>
<th>Dates</th>
<th>Activity</th>
<th>Assignment(s)</th>
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<tbody>
<tr>
<td>01</td>
<td>03-07 June</td>
<td>Mon: 11am Dr. Sahni’s Address</td>
<td>BE THERE</td>
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<td>Mon: 3-4pm Course Objectives,</td>
<td>Read Infrastructure URLs</td>
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<td>Grading, Project Description</td>
<td>Read course webpage(s)</td>
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<td></td>
<td>Tue: 3-4pm First Class Session</td>
<td>Read assigned papers</td>
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<td>Wed: 2-4pm HWCOE Address</td>
<td>BE THERE</td>
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<td></td>
<td>Thu: 3-4pm Second Class Session</td>
<td>Read Neural Net papers</td>
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Week | Dates         | Activity                                      | Assignment(s)                                      
---- | --------------|-----------------------------------------------|--------------------------------------------------
02   | 10-14 June    | Tue: Algorithm details, Deep learning; Pres#1 overview | Read assigned PowerPoints                          
      |                | Thu: Possible Presentation #1 More algorithm details | Prepare Presentation #1 Draft your algorithms      
      | 03 17-21 June | Tue: More algorithm details Complex image simulation | Late Presentations #1?? Develop noise simulator    
      |                | Thu: Details of Presentation #2 Time Management details | Prepare Presentation #2 Develop more algorithms    
      | 04 24-28 June | Tue: More deep learning details                | TBD                                               
      |                | Thu: Presentation #2 Demo PatternRec results   | Present Presentation #2 Test & eval algorithms     
      | 05 01-05 July | Tue: Algorithm performance Final Report details | Prepare test results Develop more simulations      
      |                | Thu: NO CLASS - Independence Day                | Final Report details Develop Final Report         
      | 06 08-12 July | Tue: Clean-up tech issues                      | Provide Draft Final Report                        
      |                | Thu: Final Presentation, with Final Report      | Present Presentation #2 Provide Corrected FinRpt  

Attendance for lecture and all meetings is expected. Failure in regular attendance may result in deductions to your grade. Contact your instructor if you have an excused absence to work out a plan to make up the work. Excused absences must be consistent with university policies in the undergraduate catalog (at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx) and will require appropriate documentation.

Evaluation of Grades:

- **Presentation #1:** 0 points 0 percent of grade
- **Presentation #2:** 5 points 5 percent of grade
- **Project Completion:** 10 points 10 percent of grade
- **Project Complexity:** 10 points 10 percent of grade
- **Quality of Results:** 15 points 15 percent of grade
- **Final Presentation:** 20 points 20 percent of grade
- **Final Report:** 40 points 40 percent of grade

Grading Policy: **NO CURVING OF ANY SCORES**

The following UF grading system will be applied to your total score:

- 93 - 100 : A 4.00 Grade Points
- 90 - 93 : A- 3.67 Grade Points
- 87 - 89 : B+ 3.33 Grade Points
- 83 - 86 : B 3.00 Grade Points
- 80 - 82 : B- 2.67 Grade Points
- 77 - 79 : C+ 2.33 Grade Points

More information on UF grading policy may be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx
Students Requiring Accommodations: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://www.dso.ufl.edu/drc) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu/evals. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

University Honesty Policy: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use: All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy: There are Federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html.