

## CIS 596 - Entrepreneurial Computer Science Project / CIS 598 - Computer Science Project Course Syllabus

**Course Coordinator:** Mitch Neilsen, [neilsen@ksu.edu](mailto:neilsen@ksu.edu)

**Office:** 2173 Engineering Hall

**Office Hours:** 9:30 – 11:00 am, M,F, or by e-mail [neilsen@ksu.edu](mailto:neilsen@ksu.edu), or via Zoom:

**Zoom:** <https://ksu.zoom.us/my/neilsen>

**Meeting Room:** Kedzie 004

**Meeting Times:** M,W,F 3:30-4:20 pm (normally only on Mondays)

### Course Description

CIS 596 Entrepreneurial CS Project / CIS 598 Computer Science Project. (3) I, II. Directed studies: selection, investigation and report on some topic not covered in prior courses; may include an implementation and/or experimentation component; may be done in collaboration with other students. Completion of a plan, two reviews, and a final report with literature review and project evaluation.

Prerequisites: CIS 560 and senior standing in computer science. Students may enroll in CIS courses only if they have earned a grade of C or better for each prerequisite to those courses.

### General Requirements

- The course will be **coordinated** by Dr. Mitch Neilsen, {[neilsen@ksu.edu](mailto:neilsen@ksu.edu)}. However, students may contact any faculty member to serve as the faculty advisor for their project. The coordinator may suggest potential faculty advisors based on the area of interest. **Faculty advisors will assign the final grade for the course. They may also require other presentations not listed in this syllabus; e.g., presentation at K-State Open House or a professional meeting.**
- The work will integrate concepts from prior courses and deal with topics that go beyond material covered in prior courses. For the first eight weeks, students should review the lectures for Advanced Software Management – available via K-State OnLine under Reference Material, CIS 748. Each week, we will discuss one week of the lecture material, and the types of design artifacts that should be generated for the course.
- Project work will include a public final oral presentation. These presentations must be scheduled with the advisor, and the date/time should be reported to the coordinator. Students must also contact the CS Department Office (DUE 1184) **to reserve a room for the final oral presentation, and determine a date and time that is acceptable with your faculty advisor. Other colleagues and guests are welcome to attend. Students must also create an announcement as a 1920x1080 PNG file submitted to the coordinator (some examples are shown below).**

**AIR TRAFFIC CONTROL  
with  
ARTIFICIAL INTELLIGENCE**

Bc. Pavel Janovsky (Czech Republic, CTU)

- Team of UAV planes controlled by agents
- Tactical AgentFly project funded by U.S. Army
- Distributed reactive collision avoidance
- Hardware deployment
- Multi-agent environment
- Future of air traffic control

When: 8:30-9:30 am, Tuesday, Dec 4th  
Where: Nichols 236

**Rubik's Cube Solver**  
Using A\* Search and the Petrus Method

Seth Tolle  
CIS 598

2:30 p.m., Tuesday, December 4th  
CIS Library (Nichols 233)

- Project evaluation will consider timely completion of milestones, technical content, quality and style of writing, and oral presentation.
- Project reports will be recorded in a public repository on K-State Online for open inspection by students in following years.
- Final grades will be assigned by the student's faculty advisor for CIS 596/598.

## Milestones

- **January 2022 - Identify a feasible project with an appropriate scope and a faculty advisor for the course project. This can be any faculty member in the Computer Science Department.**
- **February 2022 - Complete the first presentation (roughly project requirements).**
- **March 2022 - Complete second presentation (roughly revised requirements and design).**
- **April 2022 - Project implementation and testing, schedule final public presentation.**
- **May 2022 - Complete final presentation and upload all documents (design artifacts) and code to course file drop box for the Project Artifacts assignment.**

### 1. Statement Regarding [Academic Honesty](#)

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the [Honor and Integrity System](#) apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

### 2. Statement Regarding [Students with Disabilities](#)

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

### 3. Statement Defining Expectations for Classroom Conduct

All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

#### **4. Statement on Mutual Respect and Inclusion in K-State Teaching and Learning Spaces**

At K-State, faculty and staff are committed to creating and maintaining an inclusive and supportive learning environment for students from diverse backgrounds and perspectives. K-State courses, labs, and other virtual and physical learning spaces promote equitable opportunity to learn, participate, contribute, and succeed, regardless of age, race, color, ethnicity, nationality, genetic information, ancestry, disability, socioeconomic status, military or veteran status, immigration status, Indigenous identity, gender identity, gender expression, sexuality, religion, culture, as well as other social identities.

Faculty and staff are committed to promoting equity and believe the success of an inclusive learning environment relies on the participation, support, and understanding of all students. Students are encouraged to share their views and lived experiences as they relate to the course or their course experience, while recognizing they are doing so in a learning environment in which all are expected to engage with respect to honor the rights, safety, and dignity of others in keeping with the K-State Principles of Community <https://www.k-state.edu/about/values/community/>.

If you feel uncomfortable because of comments or behavior encountered in this class, you may bring it to the attention of your instructor, advisors, and/or mentors. If you have questions about how to proceed with a confidential process to resolve concerns, please contact the Student Ombudsperson Office. Violations of the student code of conduct can be reported here:

<https://www.k-state.edu/sga/judicial/student-code-of-conduct.html>.

If you experience bias or discrimination, it can be reported here:

<https://www.k-state.edu/report/discrimination/>.

#### **5. Statement Regarding Wearing of Face Masks**

All students are expected to comply with K-State's face mask policy. As of August 2, 2021, everyone must wear face masks over their mouths and noses in all indoor spaces on university property, including while attending in-person classes. This policy is subject to change at the university's discretion. For additional information and the latest on K-State's face covering policy, see:

<https://www.k-state.edu/covid-19/guidance/health/face-covering.html>.