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Request for Special Problems Course

Submission of this completed form constitutes an enrollment form for a Special Problems course.

Student Name: Xiangyang Xu Student Identification No.: 10444509

Term: ☒ Fall ☐ Winter ☐ Spring ☐ Summer I ☐ Summer II ☐ Year
Year: 20 20

Course Number (include subject prefix): AAI800 Credits: 3.0

Title of Problem: A mobile app that collects and displays daily COVID-19 and flu cases.

Brief description of the Problem:

This project develops a mobile app that collect and displays daily COVID-19 and flu cases in a user-friendly manner. Machine learning will be used to project the trend and provide safety advice. Either Android or IOS platform programming is preferred.

Describe how this project will contribute to your educational development:

This will be my first time applying machine learning knowledge to a mobile app. This will improve my ability to apply machine learning knowledge.

Rubric for Grading (Instructor): see attachment

Approval Signatures:

Xiangyang Xu
Digitally signed by Xiangyang Xu
Date: 2020.05.21 16:42:30 -04'00'
STUDENT DATE

MIN SONG
~~Digitally signed by Shucheng Yu~~
~~Date: 2020.05.21 17:01:47 -04'00'~~
5/22/20
INSTRUCTOR (Print and Sigh) DATE

MIN SONG
5/22/20
DEPARTMENT DIRECTOR DATE

DEAN OF GRADUATE ACADEMICS (Not needed for SYS and FE Special Problems) DATE

REGISTRAR DATE

AAI/CPE/EE 800A Syllabus
Fall 2020

Min Song

The AAI/CPE/EE 800A course is a research course designed for master's students to solve a specific challenging research problem in the fields of Electrical Engineering, Computer Engineering, and Applied Artificial Intelligence. It is not a course designed for students to learn a particular language, architecture, algorithm, or model.

Below are the details about the course:

- Students are required to identify a challenging research problem and discuss the problem with their project advisors. Depending on the scale of the problem, the project advisor may decide it's an individual work or teamwork.
- Each student must work on the project at least 10 hours a week. Notice that students taking the EE/CPE/AAI 800 class also **need to register EE 820A** and attend all the seminar talks.
- Students meet their project advisors on a weekly basis to discuss the research and make weekly progress.
- Prof. Min Song is the course coordinator. His office hours are Fridays, 3:00 – 5:00 PM. His email address is msong6@stevens.edu. Students are expected to meet Prof. Song on a regular basis to discuss the project progress.
- In the middle of the semester, students are required to submit a mid-stage project report. During the final exam week, students are required to write a comprehensive report and develop a poster. The submitted report and poster will be jointly graded by the research advisor and Prof. Min Song.

Below are the critical components of the comprehensive report:

- Problem introduction, challenges, and related work (Section 1)
- Formal definition and/or formulation of the problem (Section 2)
- Description of the solutions and/or designs (Section 3)
- Numerical results and analysis and/or system demonstration (Section 4)
- Conclusions (Section 5)
- References (Section 6)

Here is grading procedures:

- Mid-stage report 5%
- Sections 1 and 2 of the final report 20%
- Section 3 of the final report 30%
- Section 4 of the final report 20%
- Sections 5 and 6 of the final report 5%
- Poster design 5%
- Meetings and discussions 15%