

Course Meeting Time Changed!!!

EECS 498 – Special Topics:

Building computer-based supports for student learning through inquiry

Short: Ed Tech Projects

Credit hours: 4

Pre-requisites: Senior standing

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Room: FXB1008

Time: Monday/Wednesday 1:30 – 3:00 - NOTE NEW MEETING TIME!

Description:

In this 498, the goal will be to build real software to support educational activities in K-12 and in higher education. Faculty in K-12 have suggested the need for specific pieces of software. For example, a 3rd grade teacher has been pleading for a T-Chart app – one that is collabrified, i.e., it supports synchronous collaboration. In higher ed, in materials courses, there is a need for a VR app to help students visualize the atomic structure of the materials. In high school, there is a need for a tool to support historical inquiry. In past versions of this project-oriented course, *course attendees – students – have built software that is actually used in schools, nationwide*. Teams will be formed; they will use the agile software development methodology: cycles of design, build, user test. Be prepared to visit classrooms and hear first-hand what users – learners – think of *your software!*

Tentative List of Projects:

- VR project for College of Engineering
- AR project on shadows and/or phases of the moon (maybe use new Mozilla Mixed Reality framework? <https://mixedreality.mozilla.org/>)
- Collaborative pro/con (“T-Chart”) for elementary school students
- Two projects on supporting History inquiry
- Learning matrices and wave functions in Precalculus
- Machine learning to support eye cancer research

Grading: Each of the first 5 “check-ins” are worth 15% of your grade (all members of the team get the same grade). The last check-in is worth 25% of your grade.