

CSCI 370 proposal

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**Project client:**

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**Company background:**

The Map Room in the Arthur Lakes Library at the Colorado School of Mines contains over 165,000 paper maps, and over 166,000 aerial photographs. The Map Collection is one of the 100 largest in the nation and the second largest in the state. The Map Room is visited by hundreds of people per month & used by students, professors, and professional engineers & scientists.

**Work to be done:**

I would like the students to create a digital version of a tourist pin map. At many tourist destinations there is a map with a bunch of pushpins. Tourists take the pins and place them on their hometown on the map. I would like to do this digitally.

I envision a touchscreen with 3 maps—Colorado, United States, World. People will put a marker on one of the maps. The results of these markers will be composite maps showing where visitors are from. We will harvest their data at a course level (zip code or county) to get a better understanding of where our visitors come from. We will not use the data for direct marketing, etc. In addition, when people place a pin on the digital map, a pop-up will appear and tell them about maps & books about their region and where they can find those items in the Library. I will be able to supply the data regarding the maps and books.

I want this software and system to be open-source based. Once the system is working, I hope we can allow other libraries and museums to use the system free of charge. I expect the system to work worry-free for approximately 3 years before it needs upgrades and overhauls.

**Skill set:**

Ability to work collaboratively with me. Ability to remain flexible regarding outcomes. Not required, but helpful would be familiarity with open-source mapping software and data.

**Potential internships:**

None at the moment. Although the product will be open-sourced, the students will be the authors and creators and thus receive professional recognition.

**Location:**

Arthur Lakes Library, on Mines campus. I usually work from 8am to 4:30pm Monday through Friday in the Library. Our meetings will take place in the Map Room. However, the work itself does not have to take place in the Library nor even on campus. The work itself can be where ever but the meetings (at least weekly) must be done in person.