Alternative Work Marketplace:
Currently Open Projects

**Audio and video production assistance:**
Multi-media production to convert in-person workshop learning materials into audio and video modules.
*Outcome/deliverable:* Online audio and video workshop materials created for participants to view and listen to online.

*Skills and abilities required:* Audio recording and editing skills; video production and editing skills

*Tools and systems:* Computer editing software

*Expected number of hours to complete project:* 20 hours

*Completion deadline:* 6/1/20

**HADES (Human-AI Decision Evaluation System) (SEI project)**
Elicit realistic reactions from humans operating within a game-like environment.
*Outcome/deliverable:* Create modifications to existing COCOs Creator project. Integrate with back end data collection API.

*Skills and abilities required:* Ability to modify code created within COCOs creator (Javascript) and ability to modify existing API endpoint code (C#, dotnet core 2).

*Tools and systems:* Knowledge of Amazon Mechanical Turk Program

*Expected number of hours to complete project:* variable; 20 hours per week

*Completion deadline:* 12/31/20

**HADES**
Analyze the resultant data from HADES project to determine attitudes.
*Outcome/deliverable:* Work directly with PI to deliver on project milestones, initially supporting data collection efforts, then doing the data analysis and participating in paper writing.

*Skills and abilities required:* Survey construction experience, understanding of psychological concepts as they relate to human attitudes toward decision making, knowledge of Amazon Mechanical Turk, ability to analyze data collected from surveys in back end database.

*Expected number of hours to complete project:* up to 20 hours per week

*Completion deadline:* 12/31/20

**15-466/666 infrastructure improvement**
1. An interactive web-based visualization of a modern GPU pipeline
2. A cross-platform build farm for student games
3. Building out existing lecture notes into full self-guided lessons including progress quizzes

*Skills and abilities required:*
Alternative Work Marketplace:
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1. HTML5+Javascript+WebGL development, experience with OpenGL
2. Python or javascript scripting, running Windows, Linux, and MacOS virtual machines; building cross-platform C++ development a strong plus, interfacing with CMU’s user authentication workflow a plus, github actions a plus
3. HTML5+Javascript+WebGL development, copyediting; having taken the course a strong plus

Completion deadline: 7/31/20

All-Gender Restroom Committee Poster Project
Recreate design files and create 2-3 additional posters in the same design format.
Outcome/deliverable: Design files for 4 recreated posters, design files for 2-3 new posters in same design format.

Skills and abilities required: Design skills

Tools and systems: Design software

Expected number of hours to complete project: 5-10 hours

Completion deadline: 5/22/20

Event Coding
Using point and click interface, coders will learn to detect and label words that denote events in medical health records and doctor-patient conversations.
Outcome/deliverable: After training and criterion for accuracy met, all documents that have been coded will be used in training and testing a set of machine learning models for event recognition in the medical domain.

Skills and abilities required: English as a first language and a solid understanding of grammar at the high school level. Because the doctor-patient conversations are human subject data, we will ask coders to pass the relevant CITI training modules before beginning the actual work.

Expected number of hours to complete project: Project will require as many hours as possible

Completion deadline: 5/31/20

Translate Middle School Math Resources to Spanish
Carnegie Mellon has partnered with a tuition-free high school in rural Panama, to use Mathtutor, interactive worksheets, to bridge educational gaps. Currently, Mathtutor is only in English. Translate and localize the Mathtutor resources into Spanish.
Outcome/deliverable: As the content for translation is structured in spreadsheets, an additional column for Spanish translation would need to be filled out in its entirety for each tutor. Appropriate Spanish translation needed tutor by tutor. There are 65 tutors in need of translation.

Skills and abilities required: Bilingual in English/Spanish (Latin American dialects); mathematics background preferred
Alternative Work Marketplace:
Currently Open Projects

**Tools and systems:** Google Docs/Sheets, email

**Expected number of hours to complete project:** 400 hours

**Completion deadline:** August, 2020

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**I2 - Identity and Integration**
The I2 project seeks to deploy new data-sharing technologies, modernize the Identity and access management technology for the university and launch new data and integration services.

**Outcome/deliverable:** Project manager to tie multiple workstreams together

**Skills and abilities required:** Project management

**Tools and systems:** Jira

**Expected number of hours to complete project:** 20 hours per week

**Completion deadline:** 12/20/20

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**IT Application Development and Support**
Developer/application support

**Outcome/deliverable:** Provide completion of ongoing .Net Core web development work and day to day support of incoming application support requests; broken file transfers, custom query requests, third party report building, etc.

**Skills and abilities:** At least 2 years’ experience using Visual Studio, .Net Core platform with C# and MS SQL. Web application design, console application and database design and management. Thorough understanding of object oriented programming and information security related to data and program development. Preferred experience with Microsoft Team Foundation Services for code management. Non-Technical Skillset: Accurately follow standard procedures, write documentation, track project tasks and milestones, work within a service management information management system and track time accurately. Ability to communicate clearly about systems and software requirements and make recommendations during software analysis and development. Accurate and timely code repository management.

**Tools and systems:** Visual Studio, .Net Core platform with C# and MS SQL. MVC Web design with front end Bootstrap

**Expected number of hours to complete:** 80 hours

**Completion deadline:** 7/31/20