# **Team Project TP-2:**

# **SEIS 635 Automation Project:**

# **Sponsor Survey**

Thanks for contributing your idea for an automation project for our SEIS 635-01 Fall 2019 students to work on as part of their final Team Project (TP-2).

Please provide your answers below. If you're unsure, email me (Eric V. Level) with questions at evlevel@stthomas.edu. Thanks!

***Principal project sponsor and contact info (UST email):***

Tiffany Ling, tiffany.ling@stthomas.edu

***Best day/date and time for a follow-up 15-minute interview with Eric:***

Check my Outlook Calendar. Typically, M&W 10-3, T&Th 12-2

***Automation project name:*** Engineering Senior Design Team Builder

***Brief project description (including current process(es) needing automation):***

Each fall approximately 100 students need to be assigned onto company-sponsored teams. There are typically 4 students but sometimes 3 and sometimes 5 students per team needed. Each project has a specific need for the number of Mechanical, Electrical, Computer, and Civil engineering students.

Students submit preferences for the top 5 projects they are interested in working on. They can also submit an incompatible other (someone they cannot work with) and a note about special considerations for why they are particularly suited for a project if appropriate.

The team building process is then done completely manually. Typically, I fill in the least popular projects first and then populate more sought-after projects. I also take GPA into account. I aim to keep the average GPA of each team within about +/- 0.2 of the overall average GPA for all students.

***Problems with current process:***

The current process is time consuming (4+ hours) and is prone to mistakes. All names need to be double checked at the end to ensure they all are on teams and that all teams have the appropriate mix of student disciplines. The incompatible others also need to be satisfied. Much of this double checking could be eliminated and the process would be much shorter if automated.

***Other comments:***

I would like to include a default weighting for a student’s 5 selected projects. Then those weights could be modified manually if needed based on the notes for special consideration. This would be done prior to running the teambuilder program.

I can provide access to the survey students currently use to enter their preferences as well as the responses from a recent year (after being cleansed of identifiers) and the project needs.