

2018 Census Report

1.0 Census Overview

1.1 Census Description

The YNCN census is an initiative to assess students' professional development skills and identify their pain points in the job finding process. Our goal is to integrate these insights into our event planning process and marketing strategy to ensure that our offerings are beneficial for students, and directly address their areas of need.

When: September 12th 2018 - September 28th 2018

1.3 Target Population

The target population for the census was undergraduate students at the University of Toronto, studying Engineering, Commerce, Computer Science, or any other type of quantitative discipline (e.g. Math).

1.2 Project Goals

The following goals were set prior to the census so the success of this project could be evaluated:

1. Collect data from 200-300 undergraduate students.
2. Of the engineering data collected, have at least 5 respondents from every discipline and every year to ensure representative data.
3. Gather actionable insights from the data collected.

2.0 Marketing Strategy and Branding Overview

2.1 Marketing Strategy

Marketing strategy was a critical success factor for this project. The number of responses collected was entirely dependent on the work of YNCN team members to distribute the census. To motivate YNCN members to collect census responses, we had an internal competition between each YNCN team to see who could collect the most responses. The winning team won a pimped out meeting (think champagne, sparkling apple juice, cupcakes, music, etc.) courtesy of the marketing team. Each team had their own version of the census to keep track of responses.

In addition to the competition, the following marketing strategies were used to collect responses:

1. Response recruitment in the pit
 - Volunteers set up the YNCN banner and a few laptops/tablets at the table at the front of the pit between 11am and 1pm and asked students walking by to fill out the census
 - This strategy was a great way to get face-to-face interaction with students, increase our brand awareness, and collect a lot of responses
2. Facebook
 - The census was posted in all of the major engineering and discipline groups

3. In-class marketing

- We reached out to professors teaching courses that focused on professional development and asked to give a short presentation to students at the beginning of one of their lectures and/or send the census to students on Quercus.
- In lectures, we handed out census info cards (see section 2.2) to students at the beginning of lecture and talked briefly about the goal of the census and how it could help students.

4. First Year Office:

- We reached out to the first year office and they included a blurb about the census in the first year newsletter, and put the census as a talking point on APS 100 TA's syllabus
- Our marketing team also had two APS 100 TAs that offered their students food incentives to fill out the census, which was widely successful.

2.2 Graphics Branding

For this event we made 4x4 handouts that included a short description of the census, a QR code & bit.ly link to the census. These cards were handed out when talking to students about the census at the beginning of lectures.

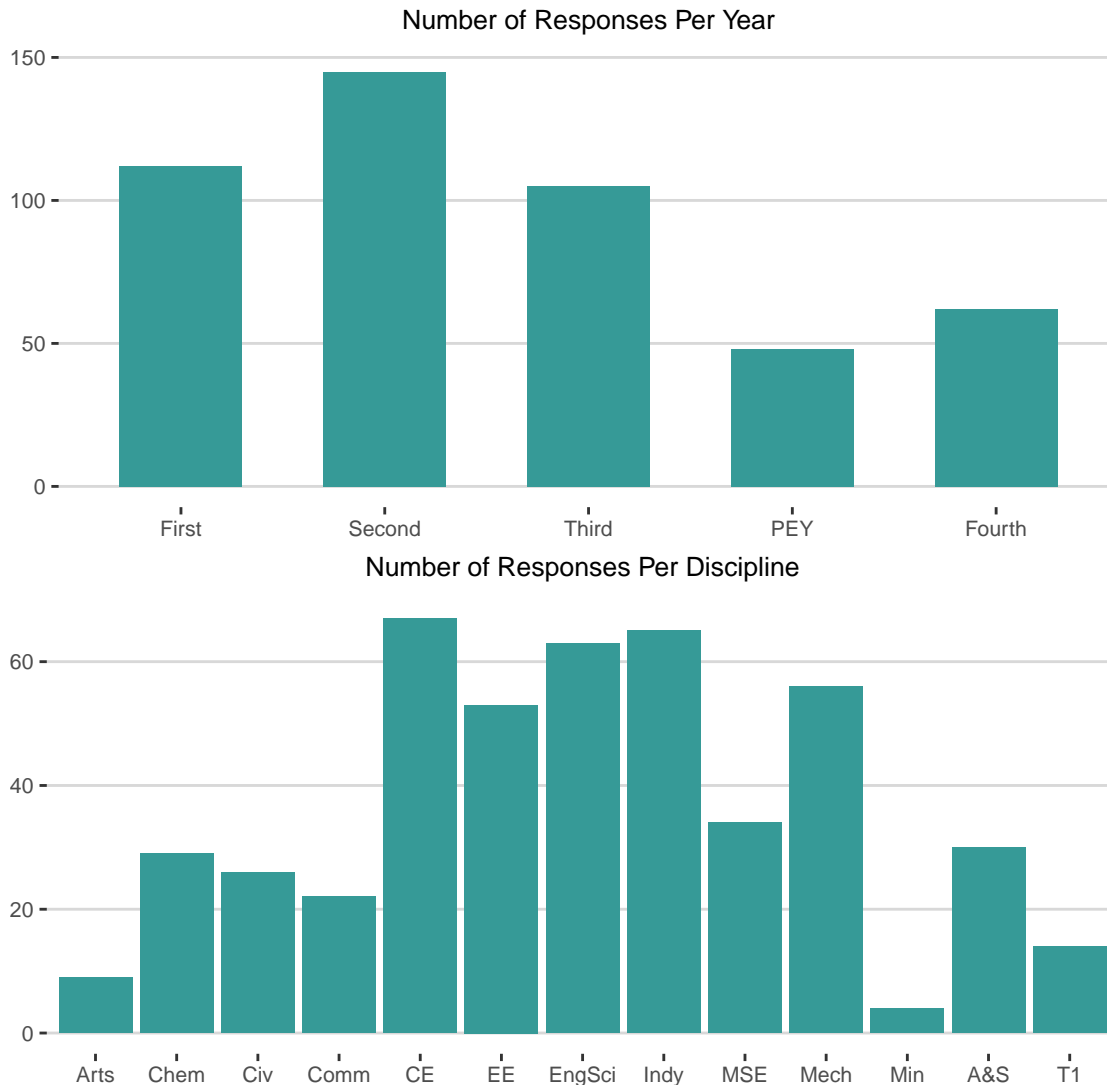


Figure 1: Census Handout Card

3.0 Results

3.1 Response Demographics

One of our goals was to get at least 5 students from every engineering discipline in each year. While we did not reach this goal, we reached our goal of 300 responses, collecting a final count of 463 responses. Below is a breakdown of the responses by discipline and year. See appendix A for a breakdown of responses from each discipline.



Our data was primarily composed of first, second, and third year students. In terms of determining student's biggest pain-points in the job-finding process, these are arguably the most important students to gather data from as they will have the least amount of work experience, thus benefiting the most from our professional development offerings.

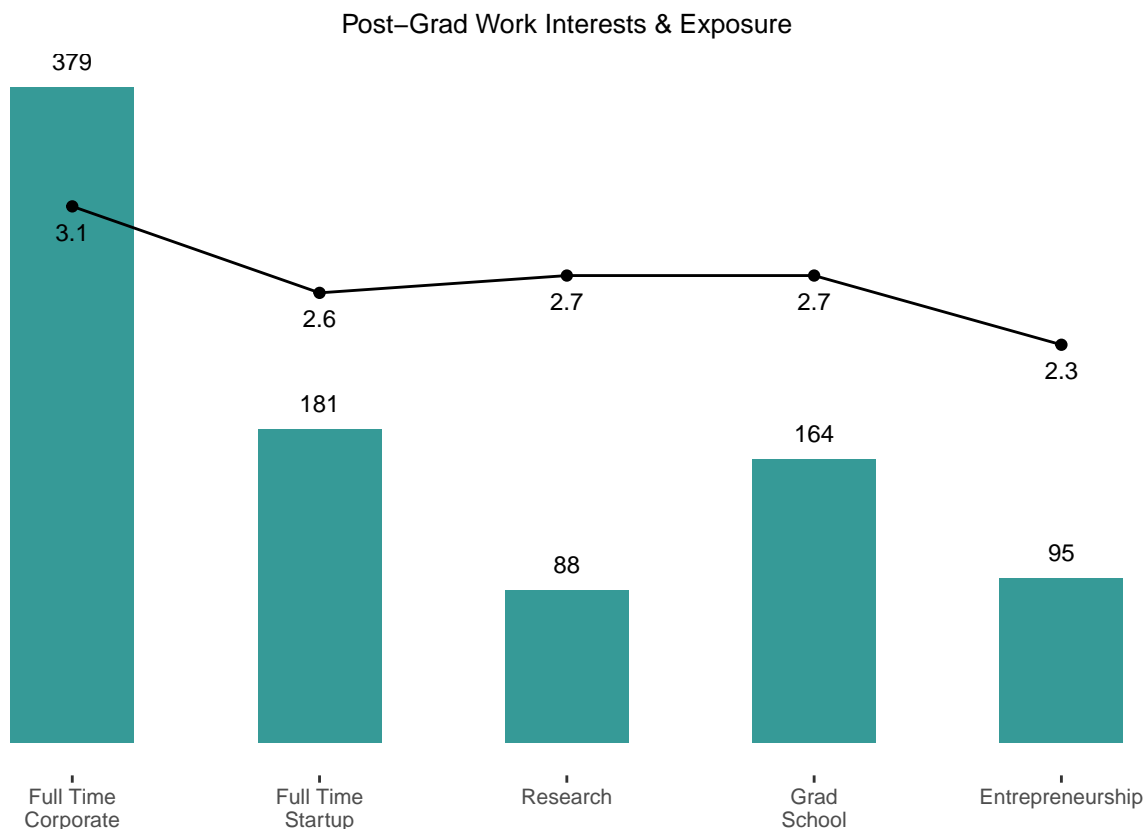
The highest represented disciplines were computer engineering, electrical engineering, engineering science, industrial engineering and mechanical engineering. Comparing these proportions to the UofT engineering demographic, these results are expected, with the exception of chemical engineering students who were under represented in our data, and industrial engineering students who were over represented.

3.2 Career Interests

The following two sections aim to gauge what types of jobs students are interested in and the types of industries they are interested in. It should be noted that in the census, students could pick up the three industries of interest and any number of types of jobs, so there is significant overlap between career interests. Further, some graphs omit science/math, commerce, T1 and min responses, as there were so few responses their data alone didn't produce meaningful results, and all T1s are first year.

3.2.1 Interest By Job Type

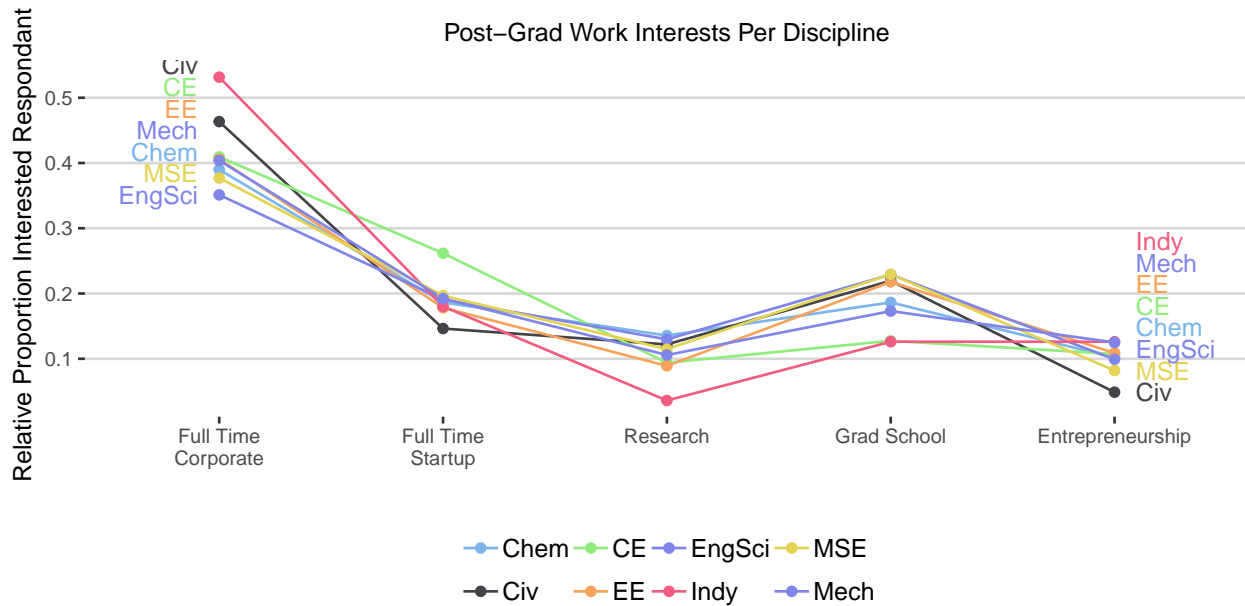
We asked students what types of jobs they were interested in pursuing after graduation, and asked them to rate their 'exposure' to each of these job types. We defined 'exposure' as how often students see job postings for a given type of job, the frequency of recruitment events for this type of job, and their overall perceived accessibility to these types of jobs. Ideally, the job type of the highest interest would also have the highest exposure. Below are the overall number of interested students and overall average exposure ratings:



Some interesting points:

- Students are by far the most interested in full time corporate jobs after graduation. However, this was not proportionally represented in the exposure rating, which was expected to be much higher than 3.1.
- Research had a relatively high exposure (2.7) despite low interest in this type of job.
- Research and Grad school had the same exposure rating despite grad school having twice the number of interested students as research.
- Exposure to entrepreneurship was relatively low compared to the number of interested students.

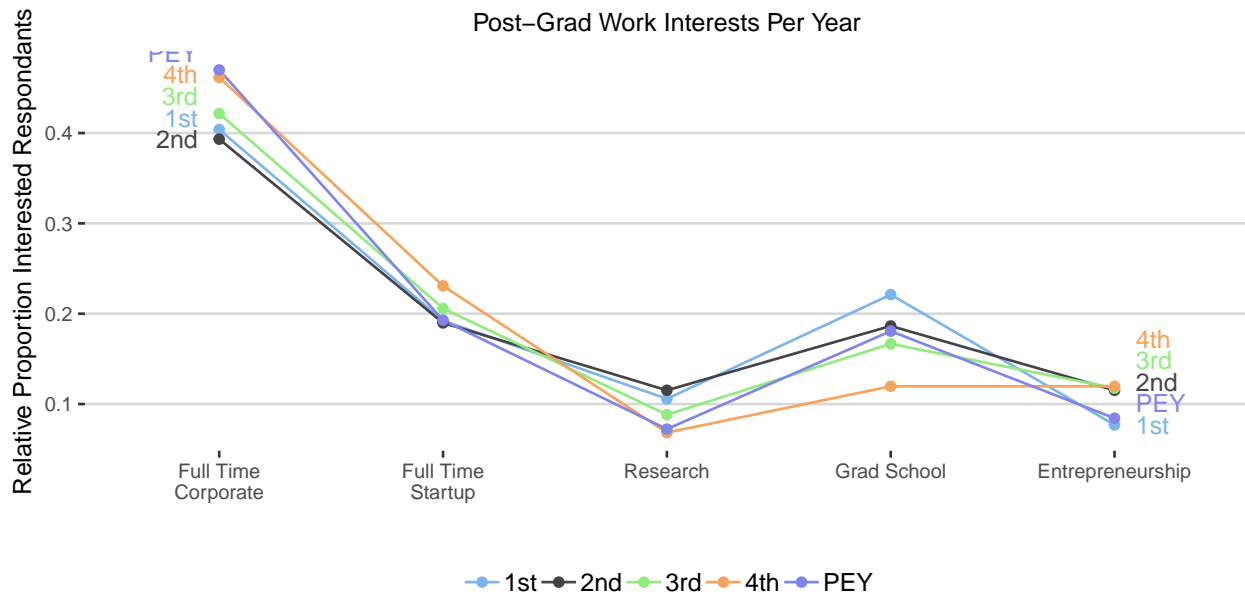
The overall trends in industry interests were similar between each discipline. Below are the responses for industry interests:



Here are some key (and expected) differences between disciplines:

- Indys and Civs had the highest interest in full time corporate opportunities (>50%, >45%)
- Computer Engineering students had the most interest of all the disciplines in pursuing start up opportunities
- MSEs, Civs, and EEs had the highest interest in grad school (~20%), while CEs and Indys had the least interest in perusing graduate studies (~10%)

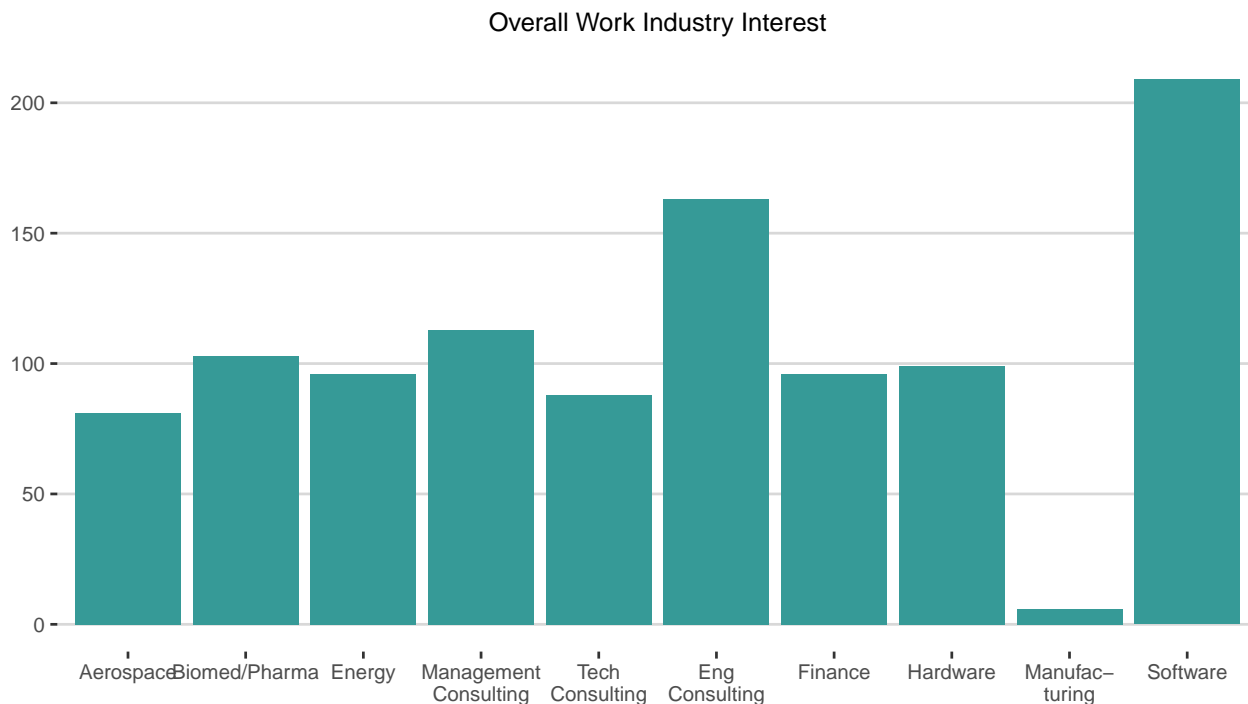
Again, this trend was similar by year:



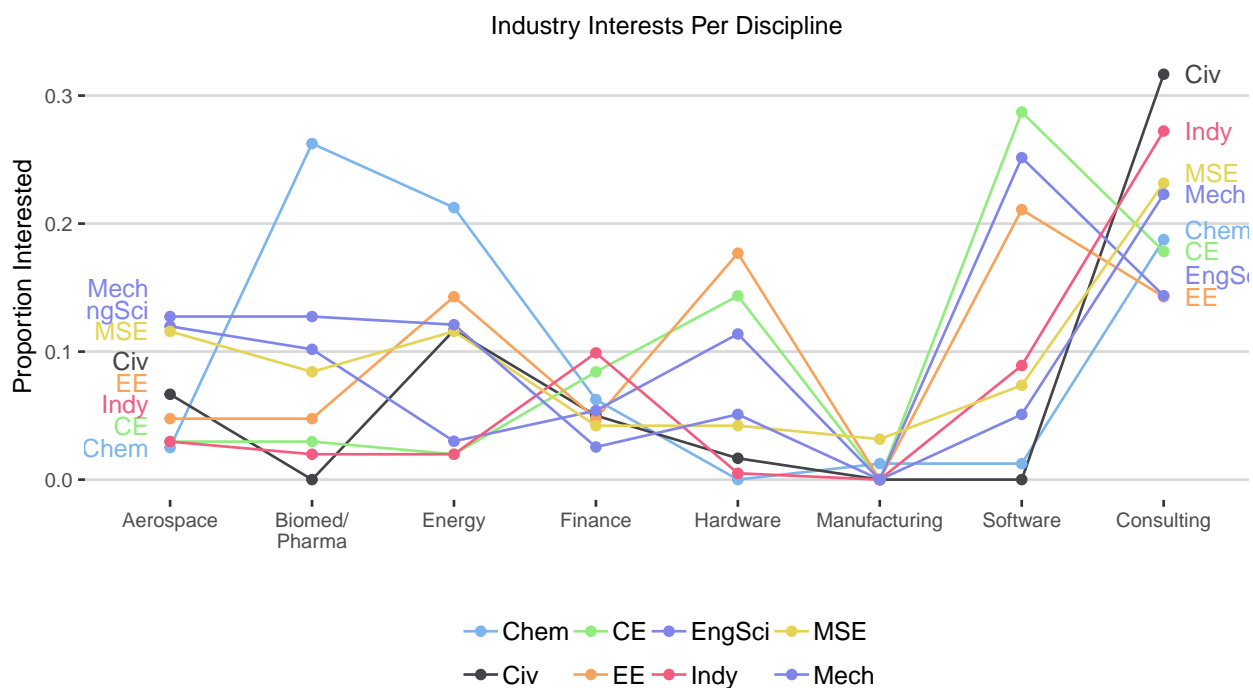
An interesting observation is that interest in graduate studies declines steadily from first year through to fourth year.

3.2.1 Interest By Job Industry

Lastly, we asked students what industries they were interested in working in. Software had the highest number of interested students (209), with engineering consulting the second highest (163).



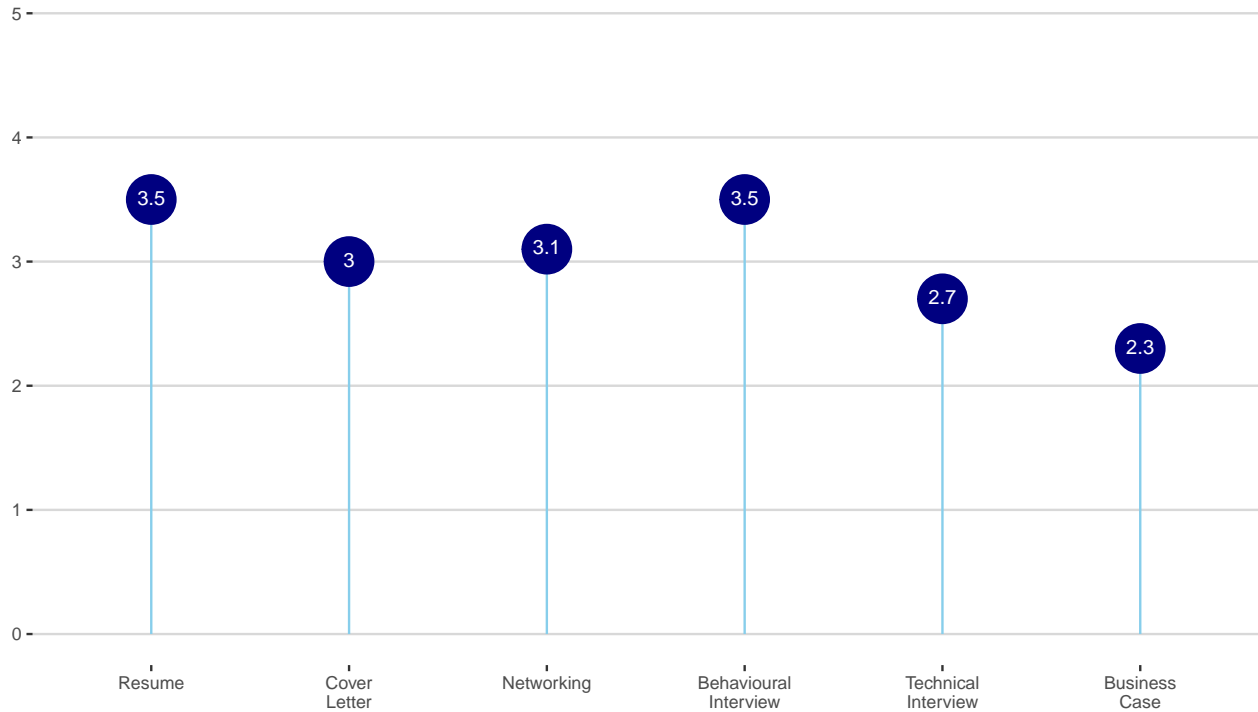
Industry interest trends per discipline can be found below. As expected, these varied widely. For simplicity, management, tech, and engineering consulting have been generalized into consulting. See appendix B for the number of interested students per discipline.



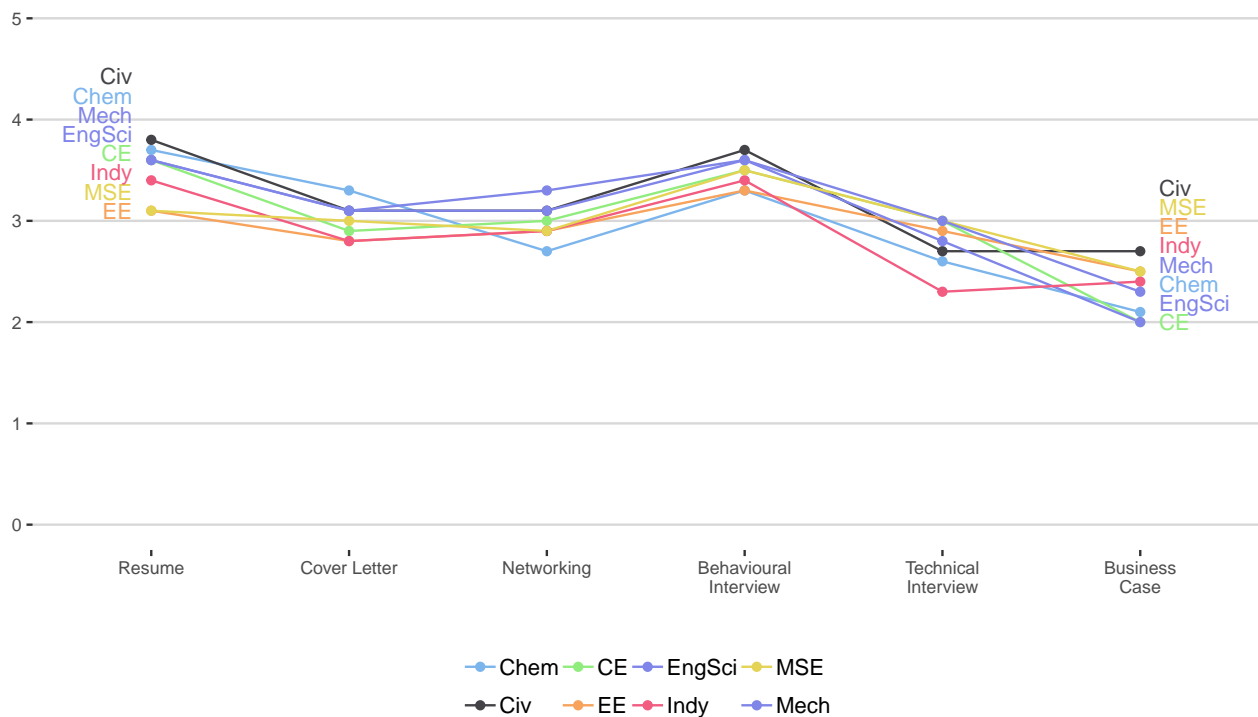
3.3 Professional Development

We asked students to rate their own ability to comfortably write an application-ready resume and cover letter, network with industry professionals, and comfortably complete behavioural, technical, and business case interviews. The responses are summarized below.

Average Ratings of Job Application Competencies

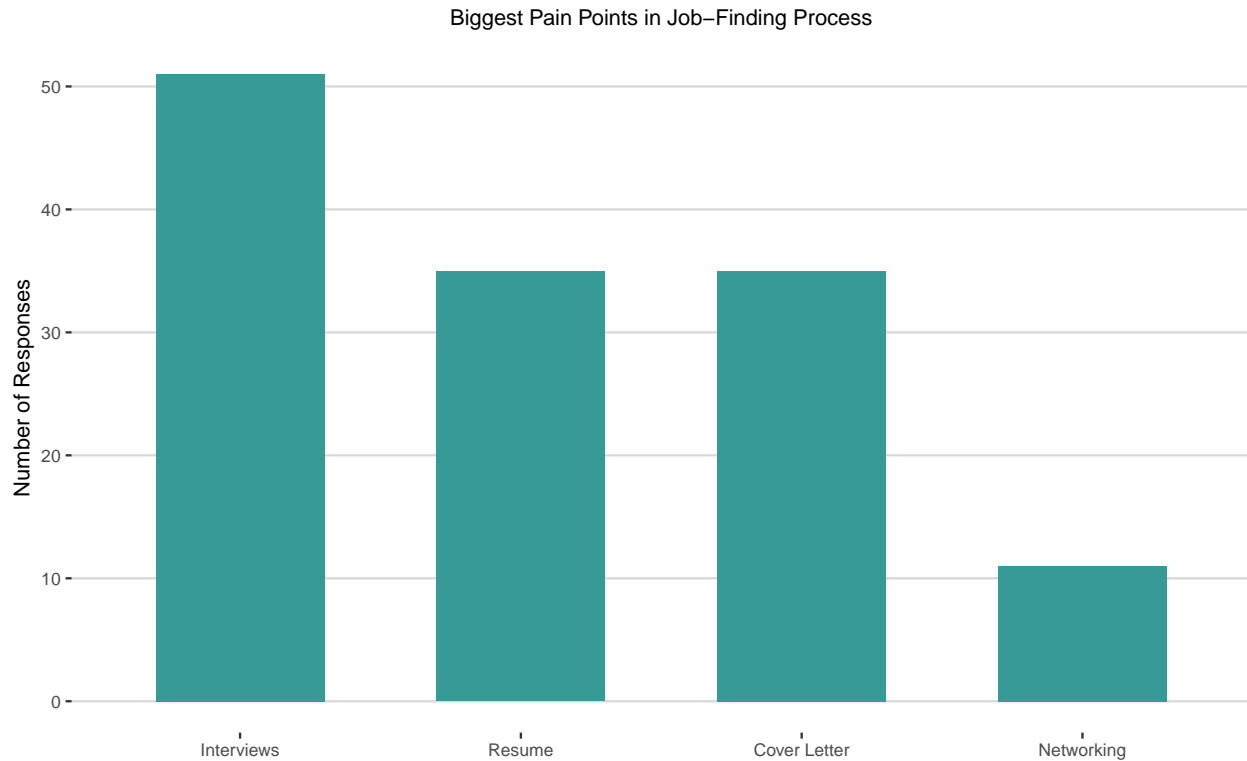


Average Ratings of Job Application Competencies by Discipline



Students are least comfortable completing technical and business case based interviews. Breaking this down by discipline, the trends are similar. Industrial engineering students had the lowest ratings for technical interviews, which may identify an area of opportunity as it's common for industrial engineering students to have to complete a technical interview for analyst positions (e.g. SQL queries, simple coding questions, etc.). Engineering science and computer engineering students rated their competency for business cases the lowest.

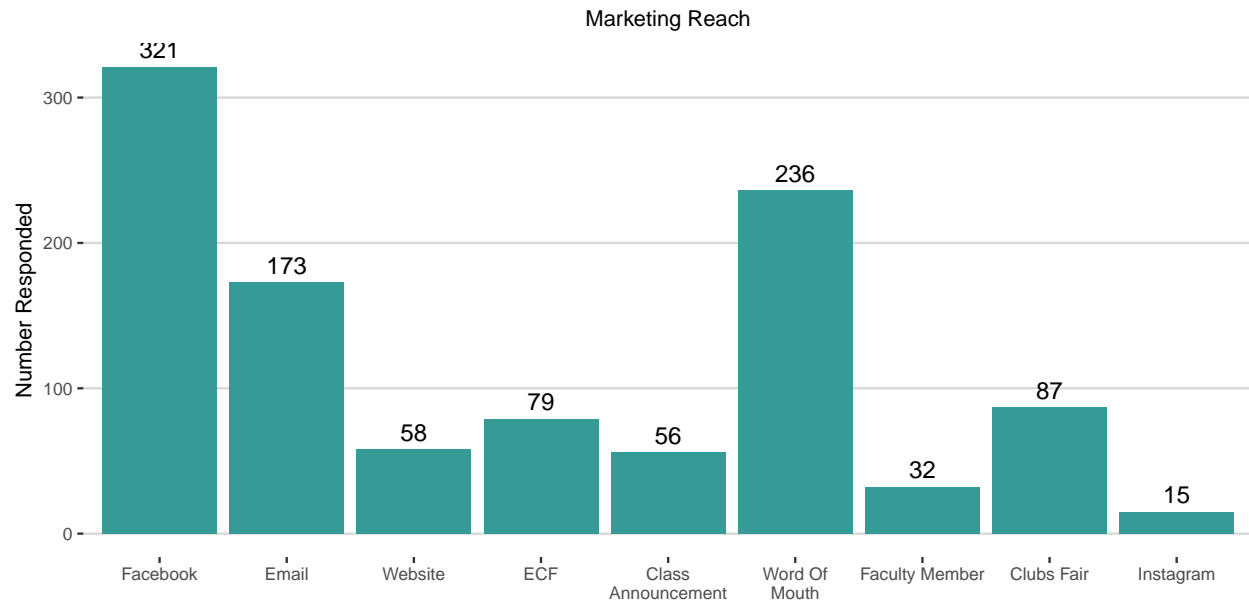
We also asked students to optionally let us know what their biggest pain point in the job finding process was. We had 260 responses. Frequency of the keywords “Interview”, “Resume”, “Cover Letter”, and “Networking” can be seen below.



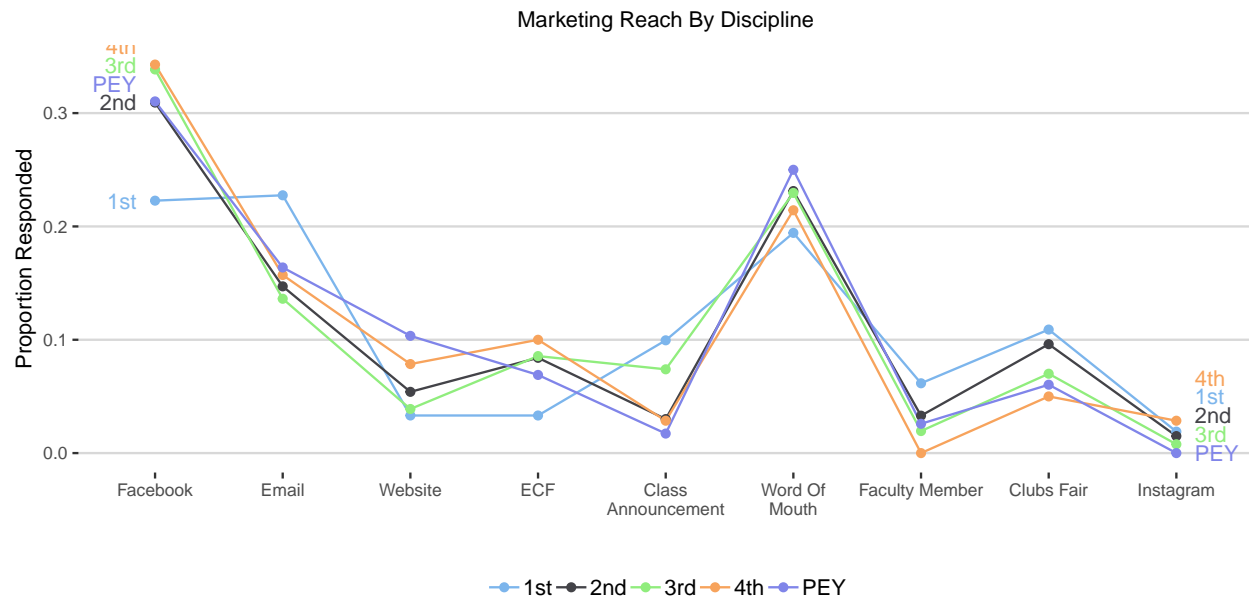
Given the volume of students mentioning interviews as a part of their biggest pain point in the job finding process, along with the overall average interview ratings of 2.86, it's clear that students struggle most with this area of the job finding process.

3.4 Marketing Channels

Our last question in the census asked students about how they hear about YNCN events. As expected, Facebook accounted for the majority of responses.

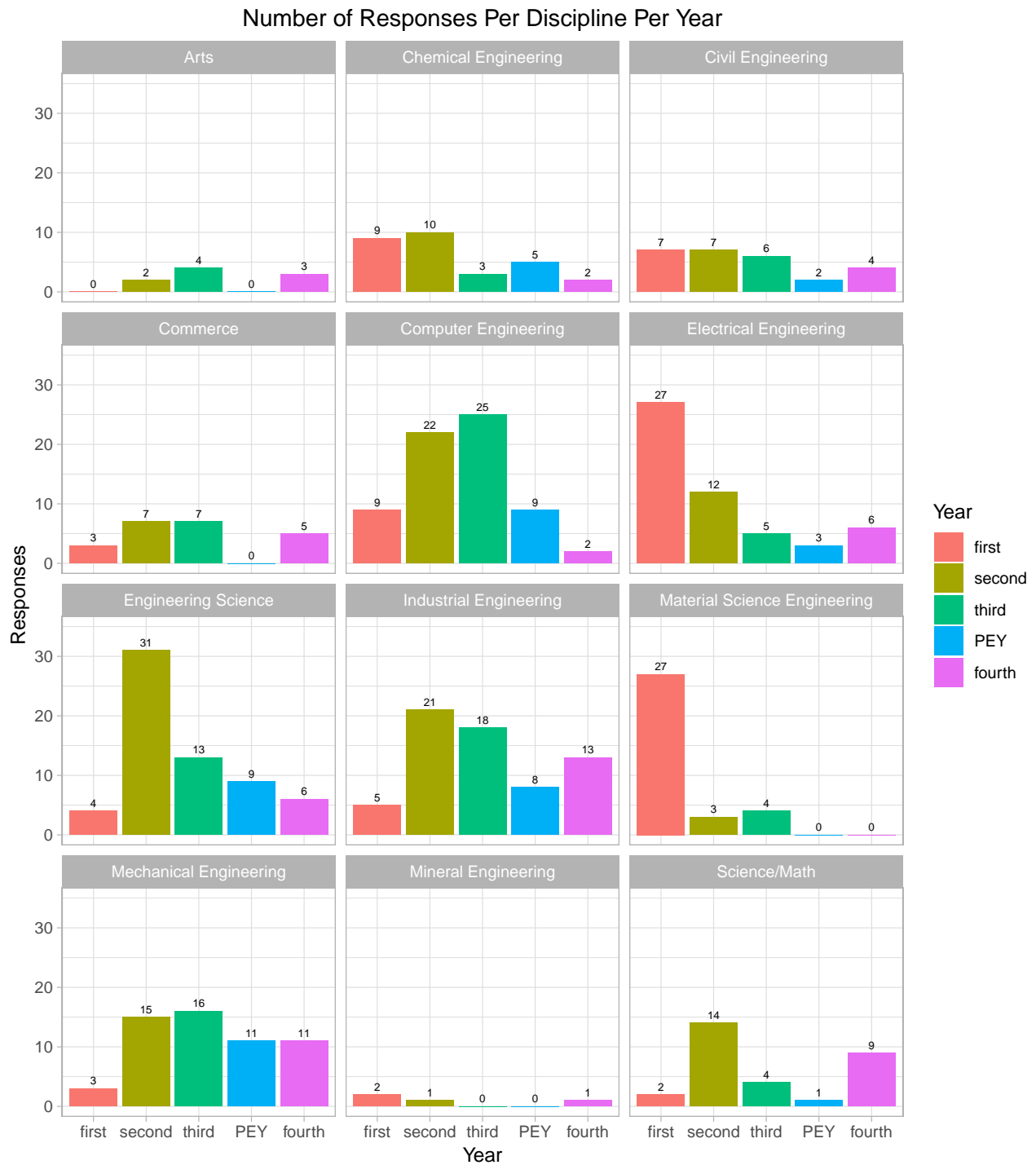


However, breaking this down by year, first year students had the lowest responses for Facebook, and about equal responses for word of mouth. This demonstrates the importance to reach out to first years in frosh events, in-person marketing, and clubs fair etc., as most first year students are likely not active in Facebook yet.



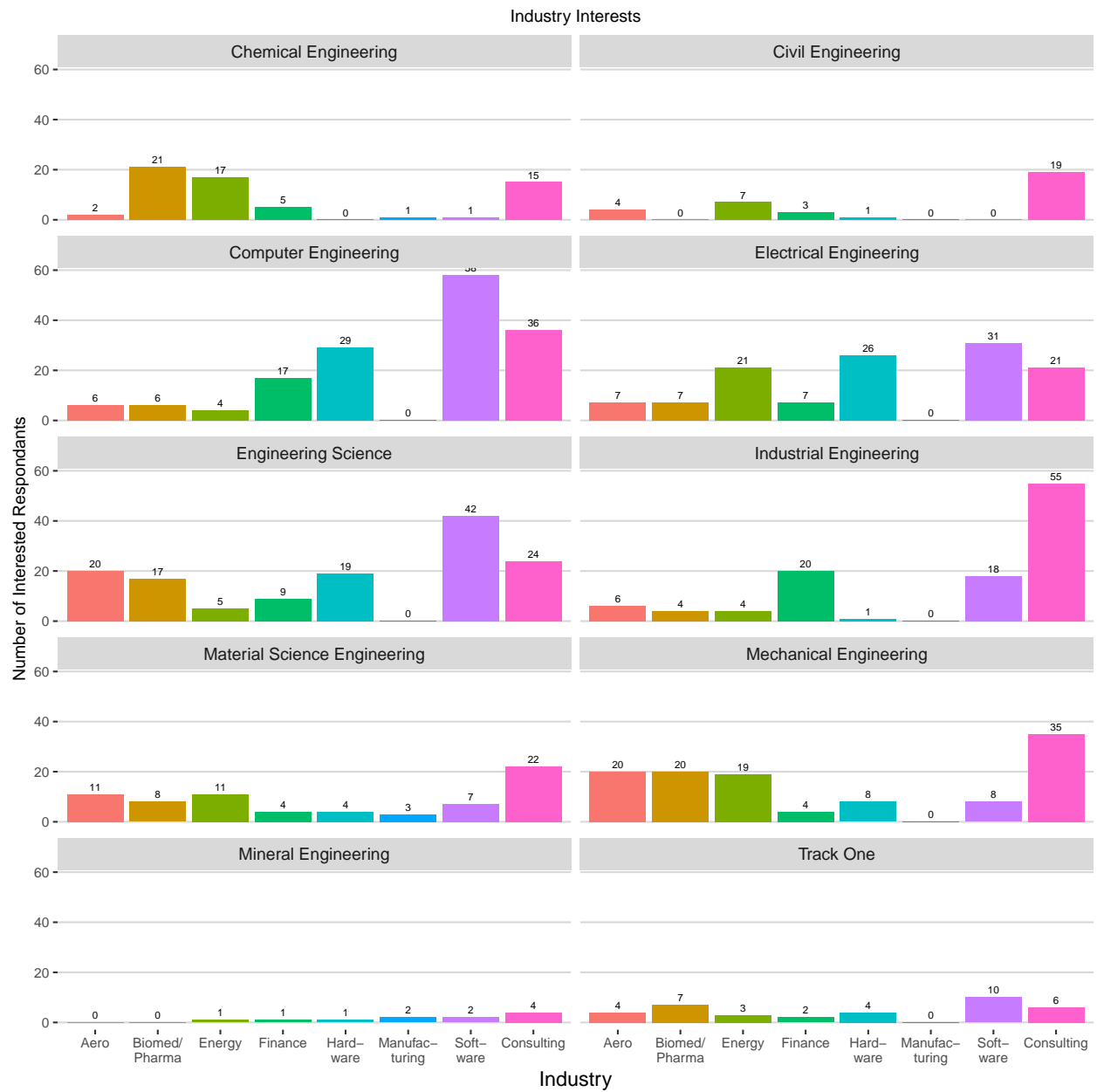
Appendices

Appendix A



Note that the above graph omitted 14 Track One responses.

Appendix B



Note that the above graph only includes engineering responses.

Appendix C

