

DartTree: Connecting Students to Careers 'Off the Beaten Path' ENGS 12 Project 6: Final Report

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Team Members:

Our team consists of Campbell Brewer, Cathy Wu, Donovan Fernandes, and Maxwell Saylor. Campbell Brewer is a '19 history major, planning to go into the fashion industry. Donovan Fernandes is a '21 undeclared, with unclear future plans, but aiming to go into the business realm. Max Saylor is a '19 Earth Science major who is undecided for next steps but hopes to include Design Thinking in everything he pursues. Cathy Wu is a '21 undeclared, leaning towards majoring in cognitive science.

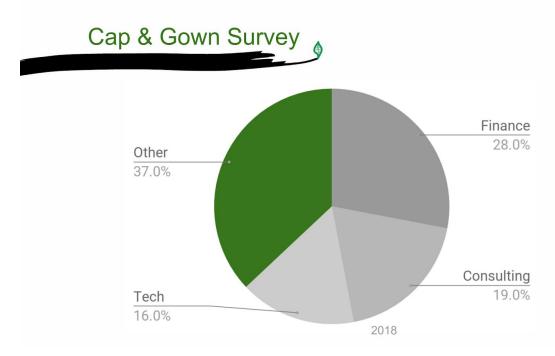
Executive Summary:

The Dartmouth Center for Professional Development is an incredibly useful resource for students on campus — especially those who plan on going into finance, consulting, or other "on the beaten path" careers. However, students seeking futures "off the beaten path" do not receive this same level of support. While professors, alumni, and other helpful connections are available, we've found the accessibility and user-friendliness of the resources used to access these is an issue. We propose a redesign of the existing systems of job-searching in order to eliminate friction within this process by increasing accessibility and by decreasing the intimidation factor in reaching out — fostering connections based on shared interests outside of the professional sphere.

Slide by Slide Presentation:

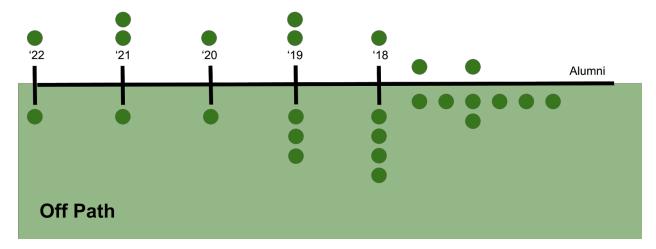
Use the design thinking process to enable students to prepare for and pursue careers "off the beaten path."

Our direct challenge was: Use the design thinking process to enable students to prepare for and pursue careers "off the beaten path." With this, we set off on the design thinking process with the goal of finding a viable, simple solution. Our first step was to conduct research to better understand the user group we were designing for.



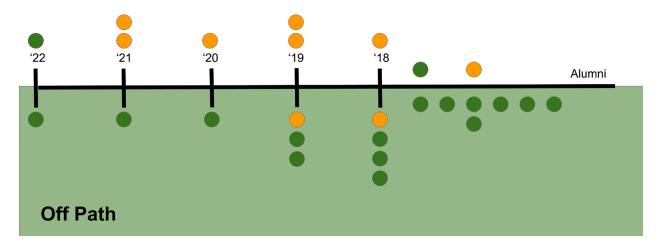
Before we proceeded with our research, we had some assumptions we had to clarify. Going into the project, we all projected that finance and consulting jobs would take up about 50% of each graduating class, and therefore could be defined as "on the beaten path." By looking at the 2018 Cap and Gown Survey, we found that our assumptions were correct. However, we did chose to add tech, with 16%, to students "on the beaten path." The group we focused on was the 37% of students who fell under "other," and we defined this group as the "off-pathers."

On Path

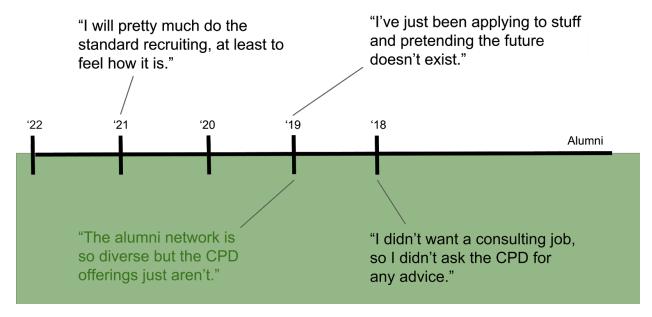


We started out by conducting interviews. In order to gain a variety of perspectives, we interviewed a range of people, both on and off "the beaten path," from both sides of the job search process, and from multiple points within it. We wanted to make sure we obtained the perspective of students from all class years, including recent graduates, in order to ensure that our solution would be broad enough to work for everybody. We especially wanted to include alumni because of their perspective from the other side of the issue we were faced with--- if our solution for connecting the two parties was going to work, we needed input from both of groups.

On Path



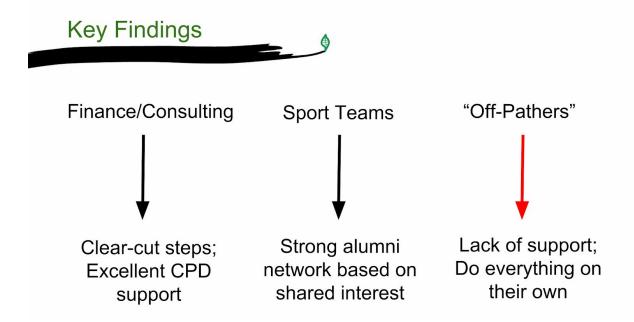
This timeline was helpful for us to organize our findings and to look for trends in our research. The dots in orange represent the students who mentioned in their interviews that they utilized the CPD often and/or were greatly helped by them. According to the graphic, it is clear that almost all of those who were "on the beaten path" made use of the CPD, and almost all of those who were "off the path" did not. Gaining this knowledge from our interviews helped us zero in on the need for support in careers off the beaten path.



From our interviews, we focused on some specific quotes from Dartmouth students. One succinct quote that was very valuable, "The alumni network is so diverse but the CPD offerings just aren't," was echoed by most of the interviewees. Throughout this process, many interviewees said that the CPD was only helpful if you were planning on going into finance or consulting. If the perception on campus was that the CPD did not offer diverse career options, we wanted to seek out alumni "off the beaten path," and see what their perceptions of Dartmouth career services were.



Three main findings from some off-the-beaten-path alumni interviews included how, on the whole, alumni are willing to talk and share about their experiences with students. They echoed each other in terms of their need to 'navigate on their own' to find themselves in their current positions, and they agree that the steps for those pursuing consulting or finance were well defined with strong assistance from the college. There was a general consensus that with their experience, and their current perceptions toward the college, the 'other' career path pursuits could be better supported. Scott Listfield, for example, explained his previous efforts (and failures) to reach back out to his former professors to try and connect students on creative trajectories with alumni artists like himself.



After analyzing our data, we came to three key findings. Number one was that those who are going into "on the beaten path" careers have ample support from campus resources. Thus, these students have easy-to-follow and clear-cut steps. Another finding was that sports teams have their own close-knit alumni network that benefits both the students and the alumni. We compared this network to the Alumni Career Network available to all Dartmouth students and found differences in their effectiveness. Due to the shared interest of a common sport to bridge class year gaps in the athletic network, student athletes felt comfortable and encouraged in reaching out to these alumni. With the Alumni Career Network however, students were uncomfortable emailing someone they did not know at all, and who appeared essentially as an entry in a database with no photo or other means of connection. The third major finding was that those "off the beaten path" experienced less clarity in terms of knowing what steps to take in pursuing their career paths of choice. This group had to essentially approach the job finding process on their own.



Students off the beaten path need to experience greater exposure to the diverse career options in order to successfully network with alumni and pursue their interests.

After we had found these specific issues to fix, we formulated a need that we focused on addressing. Because students "off the beaten path" found alumni most helpful, we focused on improving this connection. Students needed an easier means of connection to alumni who can help them develop their interest and provide guidance along their professional pursuits, so this was what we created with our final product, DartTree.



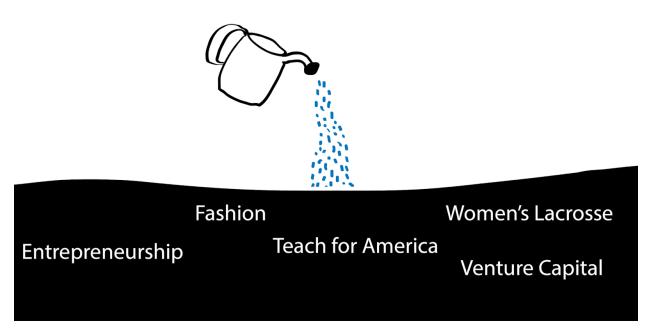
Our final prototype that we want to implement is DartTree. DartTree is an *interest-based* network focused on connecting alumni and students through information that is not found on LinkedIn or the Alumni Career Network (ACN). DartTree focuses on student and alumni interests, and not just on their career aspirations. This would allow for creating a bridge to alumni that is similar to the strong connections between students and alumni of athletic teams, but being open to students of any involvement on campus, allowing both the students and the alumni to curate more intimate connections sooner, based on the interests they share outside of only the professional realm.

Fashion Women's Lacrosse

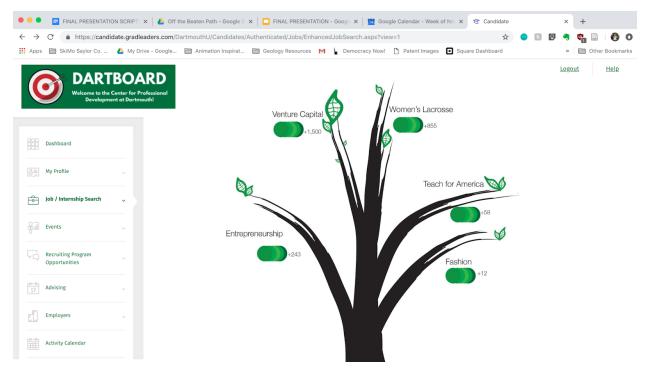
Entrepreneurship Teach for America

Venture Capital

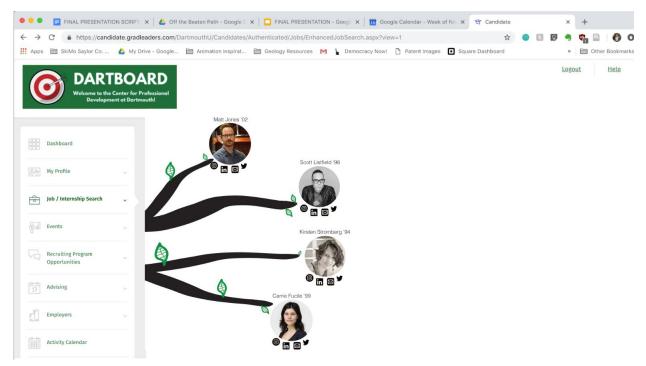
In the DartTree interface, students making a profile would input their involvements with student groups on campus, outside interests, and anything else they find to be important in their everyday lives as well as their possible career aspirations.



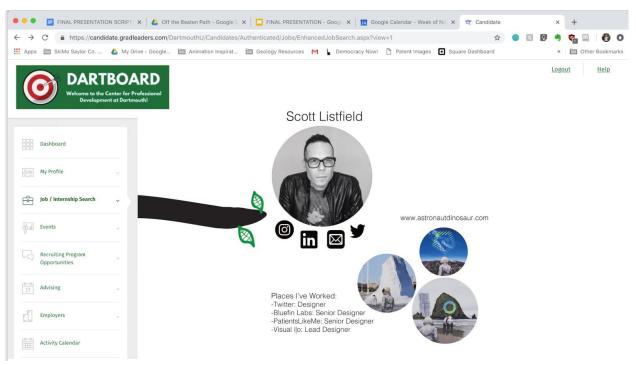
As these interests grow throughout their time at Dartmouth and beyond, they can add and remove new interests as they please. These seedlings of interest would then grow into a DartTree.



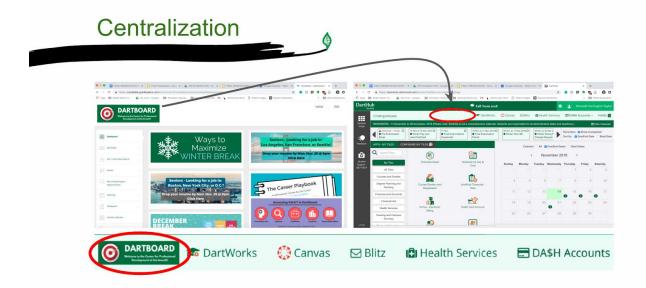
Each student would have their own personalized DartTree made up of their interests. As you can see from the visual, the DartTree's various branches represent the student's interests and would change and adapt as he/she grows. Under each branch would be a number, that being the number of alumni in the system with the same interest.



Though only a rendering, this tree would be interactive such that if the student clicks or zooms in on any part of their DartTree, they have access to alumni who share either one or more of the student's personal or professional interests.



Zooming in to one such alum gives the student more information about this specific person. DartTree provides the alum's contact information, his or her employment history, and other information such as a personal website. These aspects allow the alum's profile to have a more personal feel than the existing Alumni Career Network's catalogue-style database. This redesign targets the awkward nature of contacting alumni without knowing them. By requiring a profile picture and providing information such as interests, students immediately feel a more personal connection.



The first key feature we want to make sure to incorporate is the centralization of resources. We learned from our initial interviews (and some additional ones) that many Dartmouth students do not know how to access the existing resources available to them—some are unaware that they even exist! A simple fix would be to place a link to DartBoard onto DartHub (formerly Dartmouth Banner Student). Most other student tasks are found and completed through DartHub, so naturally a job/internship search resource should be located there as well.



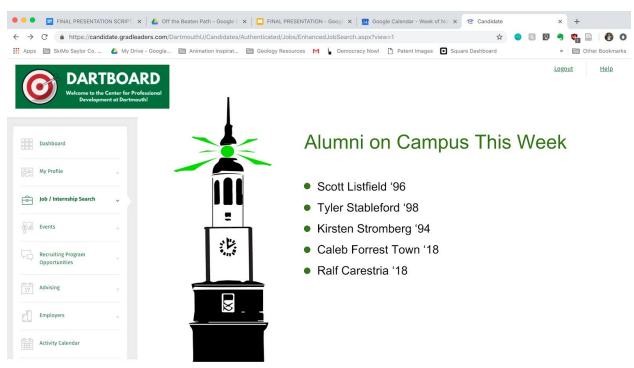
Knowledge of when alumni are on campus to encourage in-person networking.



Another feature we want to implement was knowledge of when alumni are on campus. This idea was brought to us by Chandlee Bryan, the assistant director of the CPD. She made us aware that the Hanover Inn has an alumni board which shows which alumni are on campus each day/week. We want to implement this into our online interface for easier access.



Next to each profile, there would be a Baker-Berry tower icon next to the person's name. In this example, if Scott was going to be in Hanover this week, his tower icon would light up, allowing those on campus the chance to connect with him in person. This simple addition gives students a great chance to easily network with alumni.



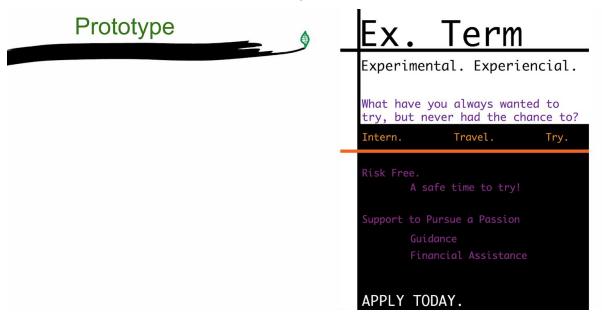
Furthermore, clicking on the tower icon populates a list of all alumni on campus that week. This would greatly help with the networking process as students have more opportunity to network. In-person connections are also much easier for both parties and allow a much more personal connection to develop naturally.



One of the largest barriers we found that keeps students from reaching out to alumni they do not know is agonizing over wording for the initial 'cold call' email, where students work to strike the balance between professionalism and sounding human. The intimidation of initial step often leads some to forgo networking entirely—depriving them of possible connections that might benefit them along their paths to pursue a creative career. By adding the feature of Networking Pet Peeves, and Networking Preferences, the aim is to allow this transparency to reduce friction in the process of reaching out. While students 'on the beaten path' have guidance and a general template of how to contact alumni, the wide range of 'off the beaten path' alumni makes knowing the alum's levels of comfort when connecting crucial to students who wish to network.

Pathway to Solution		
Off the Beaten Path Upperclassmen	Off the Beaten Path Sign up	OBP Sophomore Summer Recruitment
Upperclassmen looking to be mentors in the Off the Beaten Path Program (OBP) Name * Short answer text.	Application for students warrling to be in the OBP program Name (first and last) * Short answer text	Tell us your interested industry/field and we will bring related companies/alumni to campus. Name * Short answer text.
Year*	Year * 22 21 20 20 30 30 30 50 50 50 50 50 50 50 50 50 50 50 50 50	What is your major? * Short answer text What industry/ industries do you want to head into? * Short answer text
Major? * Short answer text What industry are you heading into? *	Industry area of interest (select all that you have any interest in learning more " about) Health and Sciences Education	Are there any specific companies/ groups you would like to be on campus? * Short answer text Other thoughts or comments
Short answer text Are you interested in being a mentor (leading weekly discussions) or being a * guest speaker at a mentor's session (short talk about where you are/why you're there followed by question answer)?	tech angineering Retail, Wholesale, goods and services environment	Long answer text
Mentor Guest Speaker Both	sports/ recreation overnment/ public policy	

We prototyped other ideas before reaching DartTree. This one involved creating a 'club' type connection between students of similar interests, whereby co-years could connect with students who shared their career interests, with mentorship from upperclassmen. This was deemed as possibly 'just one more thing' to sign up for, making it a difficult addition to the busy lives of students. The photo depicts some of the Google questionnaires tested with 15 students.



Another prototype was the 'Ex. Term,' visualized briefly in a flier pictured here, which could allow students the flexibility to pursue their non-traditional interests in a 'safe' time. Instead of the strong pressures to have an internship that maybe pays well, adds to resumes and CV's through internships that hopefully lead to secure job positions, and follow the 'accepted' pathway, this experiential term would provide funding and guidance for how to pursue the non-traditional path. This ultimately was deemed something that individuals 'off the beaten path' are likely to do regardless of the support or encouragement of the school, and it was perceived as being instead an intervention that was geared toward providing those 'on the path' a chance to experience other career possibilities—straying away from our initial target group.



DALI Lab collaboration

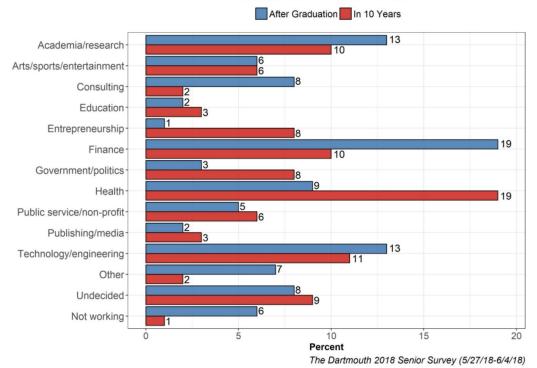
Alumni testing

Strengthen existing resources around DartTree

Tangible steps for implementing our proposed innovation, or a variation of it, would start with the need to work alongside professional web designers and computer science majors in order to generate a system capable of filtering large database information and representing that data in the visual manner we propose. This could be done with support from the DALI lab, and include the aspects of centralization, putting the resource into DartHub/Banner Student. After creating the new visualization of the alumni career network, we would seek input from current alumni regarding their experience with it--from their end does it meet their standards of a desired means to connect with current students? Or would certain features need to be eliminated or altered to better facilitate the connecting with others? As well as this, in order to fully maximize the impact of our proposed redesign, a strengthening of existing resources would be beneficial. This would include ensuring that accounts and contact information such as email addresses are current for the alumni participating in the network. Through our research we found many outdated email addresses, and so to make our service effective it would necessitate the use of current contact information transferred from the existing databases.

Appendix: (Additional research findings, proof of process, graphics, charts, etc)

Field of Work Immediately after Graduation vs. Desired Field of Work in 10 Years



Alexander Agadjanian | The Dartmouth Senior Staff

