

BYU Department of Computer Science

Public Relations Campaign Proposal

17 December 2021

ReAnn Tree, Isabella Hwang, Jennifer McReynolds, Sydney Springer

Table of Contents

Background Data Analysis	3
SWOT Analysis	6
Situational Analysis	6
Core Problem and Goal	7
Objectives	8
Big Idea	8
Key Publics	9
Messaging	10
Strategies	11
Tactics	12
Strategy Briefs	15
Calendar	19
Creativity Ladder	19
Additional Research	20

BACKGROUND DATA ANALYSIS

External Environment

Computer science is an essential field and is always hiring. BYU graduates have often been actively recruited by major computer corporations, commercial software companies and research institutions. However, recruiters for these computer science positions are now looking to hire a more diverse spread of graduates. This means that BYU's high population of white males graduating in computer science programs will have a harder time finding employment post graduation. Despite this drawback, BYU still has some upperhand for getting their graduates hired. One major advantage is the well-known alumni that lend credibility to their current graduates. Some of those alumni include Oscar-winning Bryce Randle and former President and CEO of Dell, Kevin Rollins. Establishing a pipeline between BYU and successful CS alumni is an opportunity for students to connect and collaborate with external industry professionals.

Internal Environment/Organization

BYU's Computer Science Department has a long history of top-ranking program emphases in animation, bioinformatics, software engineering and data science. Besides the animation emphasis, which is a limited enrollment program, BYU's Computer Science programs have a high student enrollment due to their stellar reputation. Although this is beneficial to maintain popularity and funding, the high enrollment of students tends to overwhelm and overwork the professors. This disproportion has affected the level of promotion and coverage the innovative and exciting research projects faculty and students receive. Additionally, this limited visibility has led to an undefined voice and brand for BYU's Computer Science Department. For example, there is no defined mission statement on the company's website. They also have very little presence on social media, and their coverage in the media is mostly focused on events, accomplishments, reminders and student highlights. There is an opportunity here to establish a more cohesive mission and purpose for the CS Department, and increase promotion of their innovative research projects.

Stakeholders

The main stakeholders for the BYU Computer Science Department are CS students, CS faculty, CS alumni, prospective students, media outlets that cover CS-related topics and anyone on social media interested in CS. There are currently 1,454 students in the program, with 83.5% male and 16.5% female—a ratio that is reflected throughout the broader CS professional industry. However, there is a BYU club, Women in Computer Science, that is specifically designed to support the women in the program and encourage others to join. Faculty members and club officers are opinion leaders for this student stakeholder group. The faculty stakeholder group is directly tied to the CS Department through their profession, research, and involvement with the student stakeholder group. There are 36 total full-time faculty, with 34 males and two females. In addition, there are 16 total adjunct faculty, with 14 males and two females. These ratios also reflect the gender disproportion in the computer science school and industry. Faculty opinion leaders are renowned researchers, donors and alumni.

There is also a strong BYU alumni stakeholder group, such as Bryce Randall and Kevin Rollins, who are renowned in their fields. However, there is currently no group on LinkedIn or Facebook for alumni to connect with students. The alumni opinion leaders tend to be leading tech and computer corporations and CS influencers.

Prospective CS students are another stakeholder group that include BYU students who are interested in CS majors and minors, but currently undeclared. Prospective CS students' opinion leaders are faculty, TA's, university admin, academic advisors, club leaders, peers, and CS professionals they know personally.

Media outlets that cover CS-related issues are an additional impacted stakeholder group. Without reporting on BYU's CS Department's work they will be missing media coverage on groundbreaking research and future influential CS professionals. Media outlets are motivated by newsworthy information, breaking research and exclusive content. There is little-to-no relationship between the CS Department and relevant CS media sources yet. The opinion leaders of this group are top industry professionals.

Recent research on those who engage in CS content on social media has shown their top interests are tech, science, sports, business, books and beauty/health. These interests are often reflected in their jobs, as CS is needed in every industry. There is a great opportunity to better

appeal to these audience interests through social media channels—especially since most stakeholders are not following the CS Department's accounts on Facebook and Instagram. Their opinion leaders are social media influencers.

Market Share and Competition

The top competitors for BYU's CS Department include USC, Texas A&M, University of Utah, University of Arizona, and University of Colorado. When comparing social media and site statistics, **USC** scores well with page authority and has a decent Instagram following, but falls behind in every other area studied. The **University of Colorado** excels in organic search traffic (OST), followed closely by Texas A&M, and soars alongside University of Utah for backlinks. However, Colorado's social media presence is near extinct, and the high rates of backlinks are largely due to the CS School's placement in a subfolder off the main school website.

The biggest competitor for BYU would be **Texas A&M**, with high numbers for both site and social media, including 23.3k Instagram followers. **University of Utah**'s biggest threat to BYU is their steady incline of site traffic and consistent branding, while **University of Arizona**'s lack of social media presence and declining numbers eliminate them from the pool of possible threats. **BYU's** consistent site traffic, decently sized social media following, and slight increases in backlinks (over 50% compared to their competitors) are their main advantages. Despite that, BYU only holds 10.3% of the share of voice with media coverage, with USC taking up nearly half, and Colorado and Arizona barely pushing BYU out of the top three.

In addition, BYU's website has significantly fewer backlinks, OST, and authority than its competitors. Increasing traditional media coverage of BYU's research, learning opportunities, and tech advances through the creation of more website backlinks and boosting organic traffic will increase share of voice. Opportunities to increase social media presence and engagement which will also help increase share of voice and online authority.



SWOT ANALYSIS

Strengths:

- Top ranking programs in BYU's CS Department (Internal Environment)
- Innovative and exciting research (Internal Environment)
- High student enrollment (*Internal Environment*)
- Opportunistic field with plenty of jobs (External Environment)

Weaknesses:

- No established voice and brand (Internal Environment)
- Significantly fewer backlinks, organic traffic and authority to site (Competition)
- Share of voice and media coverage is lower than other schools (*Competition*)
- Lack of promotion for BYU's active research projects (*Internal Environment*)
- No defined mission statement (*Internal Environment*)

Opportunities:

- Appeal more directly to interests of audience such as technology, sports and business (Stakeholders)
- Increase social media presence and engagement (Competition)
- Encourage successful alumni to connect and collaborate with students (External Environment)
- Increase media coverage for research projects (*Competition*)

Threats:

- Overwhelming number of students (*Internal Environment*)
- Busy professors with little time (*Internal Environment*)
- Lack of student body diversity (External Environment)
- Less appealing to recruiters seeking diverse hires (External Environment)

SITUATIONAL ANALYSIS

BYU's Computer Science Department is made up of top-ranking programs and a high enrollment of students (*SWOT strengths*). Because of this they have contributed to the CS field by producing innovative and exciting research (*SWOT strengths*). However, the CS department

struggles when it comes to branding and identity. They have no established voice, which is seen in the absence of a department mission statement (*SWOT weaknesses*). This negatively affects the department's ability to connect with their stakeholders and further grow their audience, especially digitally. Their website has significantly fewer backlinks, organic traffic, and authority compared to many well known CS schools in the country (*SWOT weaknesses*). Additionally, their share of voice and media coverage is lower compared to other schools, and there's a lack of promotion of the department's research projects (*SWOT weaknesses*).

While the department can attempt to make cosmetic changes to their website and social media accounts, there are still many limitations in the makeup of the department and the demands of the field. There are an overwhelming number of students in the department, which spreads professors thin and leaves them constantly strapped for time (*SWOT threats*). And even with the strong student presence there is an immense lack of diversity in BYU's CS programs (*SWOT threats*). This is especially limiting for both students and the department as a whole, because research has shown that recruiters look for diversity when picking their ideal candidate (*SWOT threats*). However, the CS Department has many opportunities to collaborate with well-known and successful alumni (*SWOT opportunities*). By promoting these collaborations, they can grow their online social media presence and increase media coverage of their alumni relations and research projects (*SWOT opportunities*). To further expand their reach and raise engagement, they can also produce content involving sports, technology and business. These are all interests that research has shown are talked about frequently in CS audiences (*SWOT opportunities*).

CORE PROBLEM/ OPPORTUNITY

If BYU's Computer Science Department continues without a cohesive brand and voice, then their internal and external value will steadily decrease.

GOAL

Establish a cohesive brand and voice for BYU's Department of Computer Science.

OBJECTIVES

- 1. Raise awareness of the new BYU CS Department's brand identity (mission statement, goals, and purpose) by 10% over nine months as measured by a student survey on campus.
- 2. Boost BYU CS Department's social media engagement by 10% over the next nine months, measured through the use of social media analytics tracking tools, such as Later, Facebook Analytics and Google Analytics.
- 3. Increase BYU CS Department's media share of voice by 5% over the next nine months, measured by tracking share of voice on Crimson Hexagon and measuring backlink count associated with online media sources.



BIG IDEA

<u>Big Idea Description:</u> Host an event to unveil BYU CS Department's new mission statement and purpose.

<u>Big Idea Strategy:</u> BYU's Computer Science Department will host a multi-day event during National Coding Week to unveil their new mission statement and purpose. Events will take place in the square between the Talmage Building and the JSFB for students, faculty, alumni and visiting media.

<u>Big Idea Visual</u>: T-shirts featuring the slogan "Show Us the Code," with different colored shirts corresponding with the four CS programs emphases.

Big Idea Slogan or Hashtag: Show Us the Code; #ShowUsTheCode



KEY PUBLICS

Current CS Students and Faculty

- Objectives: Raise awareness of new CS brand identity and boost social media engagement for CS department
- Demographics: Predominantly male, white and LDS
- Psychographics: Coding, solving computer based problems, AI, tech, algorithms, science, sports, business, solving problems
- Relationship to organization/issue: Students and faculty are at the very core of the department: they contribute to the brand, spend time on social media and can help boost engagement if they find the content interesting, relevant, and helpful.
- Opinion leaders: Alumni, researchers, internship bosses and other CS individuals
- Motivating self-interests: Being part of a renowned program that recruiters target and everyone knows about. Also motivated by good grades, learning new things, satisfying solutions to problems and a sense of community in their program.
- Viable communication channels: social media, university and CS department newsletters, and visuals, like booths in the WILK and flyers

Prospective CS Students

- Objectives: Raise awareness of new CS brand identity and boost social media engagement for CS department
- Demographics: Typically freshmen and sophomores, likely 50% male, 50% female, predominantly white and LDS, undeclared major or interested in changing their major
- Psychographics: Interested in science, computers, tech, coding, looking for a new major
 or learning new skills with a minor; want to be in a program that will lead to stable career
- Relationship to organization/issue: Will help the department grow and better itself if they became a CS student; can raise awareness of the new brand and boost social engagement
- Opinion leaders: CS faculty, academic advisors, parents, peers, club leadership
- Motivating self-interests: Being part of a BYU program that has opportunities and will lead to a stable career, a sense of community in their program, finding a good job outside of school and good grades

• Viable communication channels: Social media, university and CS department newsletters, and visuals, like booths in the WILK and flyers

Local News and National CS News Media

- Objectives: Raise awareness of new CS brand identity, boost social media engagement for CS department, and increase CS department's share of voice and backlinks
- Demographics: CS focused outlets, Forbes and other media that write about higher education, general outlets like CNN that report on technology, *The Economist*
- Psychographics: Interested in the CS field, CS education and research, etc.
- Relationship to organization/issue: Connects the world of CS; can spread the new BYU
 CS identity to other people interested in higher education and CS
- Opinion leaders: Top industry professionals
- Motivating self-interests: Newsworthy information, breaking research and exclusive content
- Viable communication channels: Email pitches, news releases, social media



PRIMARY AND SECONDARY MESSAGING

- 1. Current Students: You have a place in the CS program and can find a lifelong career here!
 - i. Computer science is an essential field and is always hiring. (External Environment)
 - ii. BYU's Computer Science Department has a long history of top-ranking program emphases in animation, bioinformatics, software engineering and data science. (*Internal Environment/ Organization*)
 - iii. BYU's CS Department has well-known alumni that lend credibility to their current graduates. (External Environment/ Stakeholders)
- 2. Prospective Students: Find your place in the CS Department and build a successful and sustainable future!

- i. Upon successful completion of the computer science program, graduates are actively recruited by major computer corporations, commercial software companies and research institutions. (CS Website)
- ii. Graduates are sought after by employers in other fields, including graphics and animation, business, health and banking. You can take CS anywhere and apply it to your interests. (CS Website)
- iii. BYU's CS Department has well-known alumni that lend credibility to their current graduates. (External Environment/ Stakeholders)
- 3. Local and CS Media: BYU's CS Department has newsworthy alumni, research specialties and research projects.
 - BYU has many successful CS alumni, including Oscar-winning Bryce Randall and former President and CEO of Dell, Kevin Rollins. (External Environment/Stakeholders)
 - ii. BYU's CS Department sponsors six different research specialties, including Human-Computer Interaction and Development, Artificial Intelligence and Machine Learning, and Computer Networks, Systems, and Security. (CS Website)
 - iii. The groundbreaking research that comes out of the CS department, like winning an E3 game competition and creating a virtual tour of BYU's campus for anyone to explore, has been published in outlets such as KUTV, KSL and FamilySearch. (BYU News)



STRATEGIES

 Convince online media outlets through email pitches and news releases that covering BYU CS Department's rebranding event will interest and engage their outlet's audiences.

- 2. Assure CS students and faculty through enhanced CS Department newsletters that adopting the new CS Department brand will refine the program and establish a respectable reputation in the CS industry.
- 3. Convince CS students and faculty through social media that the CS Department provides hands-on experiences and networking opportunities in the CS field.
- 4. Persuade prospective CS students through visual media around campus and BYU's social and news media that the new CS department identity will open doors and provide an unparalleled educational experience in computer science.

TACTICS

Strategy 1: Assure CS students and faculty through enhanced CS Department newsletters that adopting the new CS Department brand will refine the program and establish a respectable reputation in the CS industry.

- Hire two students—one for social media account management and the other to manage and update the CS Department's website/backlinks. This tactic will be important for our strategy of assuring CS students and faculty that the rebranding and social media coverage will be beneficial for them. We will need competent and consistent social media to be successful.
- Create new video content for the website, social media accounts and events to
 promote the CS Department's rebranding. We will need consistent media to
 advertise with and promote to get everyone to learn and understand our
 rebranding efforts. These videos will teach viewers what it means to be in the CS
 Department.
- Enhance the newsletter to be more applicable to current and prospective students
 and to keep them informed. The newsletter will be a tool we regularly use to
 promote the rebranding and to develop a strong sense of community in the CS
 department. To get more people to bother with reading it, we need it to be as
 engaging as possible.

Strategy 2: Convince CS students and faculty through social media that the CS Department provides hands-on experiences and networking opportunities in the CS field.

- Host monthly BYU CS student takeovers to engage students. This tactic will also
 help our strategy of engaging CS students more on social media. We will be able
 to prove our connection and understanding of their major and their lives.
- Create meaningful content and post on social accounts at least twice a week.
 Posting applicable and engaging content regularly is important for gaining a following and promoting the CS Department's accomplishments and research.
 Promoting those things will gain support and solidify the CS Department's image.
- Offer incentives like food, treats and t-shirts for following the CS Department's social media accounts. This tactic will help us gain a large following for the CS Department. A large social media following will help us promote the rebranding and the impactful things the CS Department is accomplishing.
- Meet monthly with student researchers and professors to learn about and promote
 their research on social media. This will both help students to feel connected and
 appreciated in their field and will help promote their research to the media and
 those not directly involved in the research.

Strategy 3: Persuade prospective CS students through visual media around campus, BYU's social and news media that the new CS department identity will open doors and provide an unparalleled educational experience in computer science.

- Invite CS alumni to the Show Us the Code event. This tactic will again help to connect our students to the entire CS community. Alumni tend to be opinion leaders and inviting them to campus will help promote our rebranding campaign.
- Host giveaways and scavenger hunts to engage with CS and prospective students, and to
 advertise for the Show Us the Code event.. CS students have been clear in personal
 interviews that they love problem solving and they love prizes. The giveaways and games

- will all be focused on promoting the department rebranding and teaching everyone The CS Department's identity.
- Design and promote Coding week with T-shirts specifically designed for CS. This will
 again promote our Show Us the Code week and give the CS Department a sense of
 community.
- Celebrate Show Us the Code Week with games, prizes, alumni and students research displays. This will again promote our Show Us the Code week and give the CS
 Department a sense of community.
- Create a new mission statement for the department. Developing and advertising a solid
 mission statement for the department will give the CS Department direction and purpose.
 Every CS student and faculty member needs to know why they do computer science and
 why it's important for the rest of the world.

Strategy 4: Convince online media outlets through email pitches and news releases that covering the BYU CS Department rebranding event will interest and engage their target audiences.

- Pitch impactful BYU CS Department research projects to potential media outlets. This
 tactic is important to our strategy of getting media coverage for our CS department. If we
 can prove to them that BYU's CS department has important and impactful research to
 contribute, they will spend more time writing stories about us.
- Send news releases for the CS Department's rebranding event to BYU newspapers. In
 order to gain media coverage from larger outlets we will need to gain lots more coverage
 from our own school's newspapers.
- Optimize website landing pages to capitalize on engagement opportunities from media backlinks. This will make it easier for the media to engage with the CS Department because it will be simple to reference back to the Department.

STRATEGY BRIEFS

Strategy Brief #1:

- Key public: Current CS students at BYU
- <u>Tactic:</u> Give out t-shirts to students who show proof of following the BYU CS Department's social media accounts.
- <u>Action desired:</u> Attend the "Show Us the Code" event and follow the social media accounts.
- <u>Proposed headline:</u> Celebrate National Coding Week and get a free t-shirt
- Proposed lead: The Department of Computer Science is hosting a "Show Us the Code" event September 14–16th, 2022, in the square between the JFSB and the Talmage Building to celebrate National Coding Week, build a sense of community and highlight the research of students and faculty.
- News hook: There will be free t-shirts, food, giveaways and interactive displays featuring innovative computer science research projects!
- <u>SEO terms:</u> Computer Science, BYU Computer Science, BYU CS, BYU CS Department,
 CS at BYU, Show Us the Code, Coding Week, National Coding Week, National Coding
 Week Events, BYU National Coding Week, CS Research, CS Research at BYU, CS
 students, BYU CS students
- <u>Primary Message:</u> You have a place in the CS program and can find a lifelong career here!

• Secondary Messages:

- Computer science is an essential field and is always hiring. (External Environment)
- BYU's Computer Science Department has a long history of top-ranking program emphases in animation, bioinformatics, software engineering and data science. (Internal Environment/ Organization)
- BYU's CS Department has well-known alumni that lend credibility to their current graduates. (External Environment/ Stakeholders)
- Opinion leaders and how they will be used: Prominent alumni, Cosmo the Cougar and student leaders in CS-related clubs (like Women in Computer Science) will be used in

promotional videos and advertisements wearing the t-shirts to encourage these students to attend the coding week events

• Where and when distributed:

- These promotional videos and advertisements will be posted on the CS
 Department's and BYU's social media accounts and will run on the advertising monitors throughout campus leading up to the "Show Us the Code" event
- Announcements for the event will also be featured in the *Daily Universe*, the
 BYU newsletter and the CS Department's newsletter
- Additional uses after publication: These promotional videos and advertisements will be
 used after their publication in the kits sent to media outlets for coverage of the "Show Us
 the Code" event
- <u>Timeline/deadline:</u> This tactic will be a focus throughout the campaign with the deadline being the end of the "Show Us the Code" event

Strategy Brief #2:

- <u>Key public:</u> Prospective Students
- <u>Action desired:</u> Learn more about the Computer Science department and what it offers by participating in Show Us the Code Week.
- <u>Proposed headline:</u> Learn how you can solve powerful problems for powerful companies through BYU Computer Science.
- Proposed lead: The Department of Computer Science is hosting a "Show Us the Code" event September 14-16th, 2022, in the square between the JFSB and the Talmage Building to celebrate National Coding Week, build a sense of community, and highlight the research of students and faculty.
- News hook: There will be free t-shirts, food, giveaways and interactive displays featuring innovative computer science research projects!
- <u>SEO terms:</u> Show Us the Code, BYU Computer Science Department, BYU CS, Coding Week, BYU programing, BYU computers, BYU software engineers, BYU student development, problem solving, BYU Bioinformatics, BYU coding, National Coding

Week Events, BYU National Coding Week, CS Research, CS Research at BYU, CS students, BYU CS students

 <u>Primary Message:</u> Find your place in the CS Department and build a successful and sustainable future

• <u>Secondary Messages:</u>

- Upon successful completion of the computer science program, graduates are actively recruited by major computer corporations, commercial software companies, and research institutions. (CS Website)
- Graduates are sought after by employers in other fields, including graphics and animation, business, health, and banking. You can take CS anywhere and apply it to your interests. (CS Website)
- BYU's CS Department has well-known alumni that lend credibility to their current graduates. (External Environment/ Stakeholders)

• Opinion leaders and how they will be used

- CS clubs will be at the forefront of outreach towards potential students by holding booths, club activities, and working with the department and PRI lab in planning the Show Us the Code event.
- Academic advisors will offer priority appointments to inquiring students and create materials to hand out about the major

• Where and when distributed:

- Club outreach will be held throughout the week. Booths will be held outside of the Talmage. Club activities occur throughout the week as well.
- Priority appointments will be held in Wilk and Talmage offices. These will occur
 throughout the week. Materials will be distributed in advisement offices and
 throughout campus.
- <u>Additional uses after publication:</u> The materials, such as the infographics, will become standard and provided for students in advisement centers.
- <u>Timeline/deadline:</u> This tactic will be a focus throughout the campaign, the deadline will be at the end of the Show Us the Code Week

Strategy Brief #3:

- Key public: Local and CS Media
- <u>Action desired:</u> Report on CS research and the Show Us The Code event to create more share of voice and backlinks for the department
- <u>Proposed headline:</u> The future CEOs of tech are breaking ground on innovative research—and they're still living in the dorms
- <u>Proposed lead:</u> Tucked away in the Talmage Building, over one thousand computer science students are creating code and chatting up AI.
- News hook: New, timely research is being crafted at BYU and it might change your life.
- <u>SEO terms:</u> BYU, BYU Computer Science, Show Us The Code, Computer Science,
 Computer Science Students, Computer Science Research, BYU Research, Artificial
 Intelligence, Coding Week, Award-Winning Research, BYU Programming, BYU
 Computers, BYU CS, BYU CS Department
- <u>Primary Message:</u> CS at BYU involves students in groundbreaking research and produces CS graduates that are career-ready and able to change the world.

• Secondary Messages:

- BYU has many successful CS alumni, including Oscar-winning Bryce Randle and former President and CEO of Dell, Kevin Rollins. (External Environment/ Stakeholders)
- BYU's CS Department sponsors six different research specialties, including
 Human-Computer Interaction and Development, Artificial Intelligence and
 Machine Learning, and Computer Networks, Systems, and Security. (CS Website)
- The groundbreaking research that comes out of the CS department, like <u>winning</u>
 an E3 game competition and <u>creating a virtual tour of BYU's campus</u> for anyone
 to explore, has been published in outlets such as KUTV, KSL and FamilySearch.
 (BYU News)

• Opinion leaders and how they will be used:

- Top industry professionals
- Event will have alumni like Kevin Rollins, former CEO of Dell, in attendance

• Where and when distributed:

- Distributed through their respective outlets, and picked up other news outlets to spread further
- Continuous media will be shared as more research comes out of the department,
 so the outlets will have a new, reliable source for newsworthy coverage
- Additional uses after publication: Used for the new CS website to create backlinks and increase credibility
- <u>Timeline/deadline:</u> Lead-up to Coding Week, coverage of the actual event shortly after and continuous coverage of forthcoming research

CALENDAR

See this spreadsheet

CREATIVITY

Heineken's Creativity Ladder Assessment

Based on our research, we believe the CS Department is on the confusing rung of Heineken's Creativity Ladder. This rung means the creativity is bewildered, perplexing, and not cohesive. The students and faculty within the department all have an answer when asked about the identity and purpose of the CS Department, but none of them have the same answers. If the CS Department follows our campaign we predict they will rise to the contagious rung of the ladder. The energy of having a unified mission statement and purpose will establish a sense of community that will spread from the faculty to the students and beyond.



ADDITIONAL RESEARCH

Asked students in the CS department—both major and minor status—what they view the CS department's purpose, identity, and goals to be.

- 1. What is the purpose of CS in your opinion?
 - a. "The purpose of CS in general is to try and solve problems from a purely computer background but also how to better optimize our existing computer technology and better improve it."
 - b. "For me personally CS is a gateway to a larger world and an opportunity to get involved in various fields. I can do a lot with CS and the diversity appeals to me in that way"
 - c. "Deconstructed CS is really a study of **problem solving**."
 - d. "CS teaches you to think really critically about problems and how to solve them. In fact, now that I think about it, the majority of my classes focus on solving problems."
 - e. "To better understand and **creatively and efficiently apply the computational power of modern computers.**"
- 2. What makes you feel welcome in the program?
 - a. "What makes me feel welcome is **the people I meet** in it. Most of the people I meet tend to be very nice and also down to earth, and we all seem to be very honest about it when we feel genuinely overwhelmed or challenged, which doesn't make me feel alone."
 - b. "There's a **CS discord server** that I was invited to join pretty early in my first CS class. It's a really great community of people. Everyone is always super helpful and willing to answer any questions. I don't know any of these people in real life, but they still are willing to help me out."

- c. "Our advisor (Lynnette Nelson) is the best. I met with her once to discuss switching my major to CS. She was super helpful with all the questions I had ... My experience isn't unique. Everyone I've talked to about her only has praises."
- d. "The CS professors I've had have always been super helpful, friendly, and knowledgeable. They **always stress that they have office hours for us** to come to for help if we need it. They make a point in class to ask if we have questions and then **answer those questions in depth**."
- e. "The TAs are always available and very happy to help ... every interaction I've had with them has been super positive. Would recommend 10/10."
- f. "I know it's kind of the stereotype that we just code by ourselves all day, but I find that isn't true most of the time. When we can work on a lab, project, or test together, we're all for it. **I've formed groups with random people in my classes** to work on labs."
- g. "The skills that are taught have diverse applications for anything that a student may want to do. There is always **plenty of help available** for any student that asks."
- 3. How do you identify with your program?
 - a. "I try to understand the concepts that are taught and really get into it. I like to see it as a **big series of puzzles to solve**, and when I come across something challenging I genuinely want to understand why and how it works. It helps me **feel a certain amount of control over the unknown.**"
 - b. "I **love a challenge.** And **solving a problem after many hours of work** is extremely satisfying for me. It's one of my favorite things in the world."
 - c. "I'm a **total nerd/geek**. So I fit in just fine. For example, I was working with a friend on a project in one of the labs in the Talmage. I overheard someone talking about how they were having a watch party for the Wheel of Time series on Amazon. I love that book series. It's just the right place for me."
 - d. "Computer science is based on **logic and efficiency**. I personally enjoy anything in life with those attributes."

4. What is the goal of CS?

- a. "I mean the goal of CS I guess is to become good with computers in how one understands them. I guess a deeper goal is trying to optimize them and make the technology more efficient."
- b. "I think that the goal of CS is to **keep the world's computers running as**efficiently and fast as possible. From the movies, it makes it seem like the end
 goal of CS is to **develop an AI** that is better than humans at doing tasks. It's been
 a while, and I'm sure I'm remembering it incorrectly, but my first CS professor
 said something along the lines that **the goal of CS is the betterment of the**human condition. I think that's a very poetic way to put it. Does that happen a lot
 of the time? Not really. If you look at social media, you see that CS has been put
 to what can be argued is a very bad purpose. The algorithms are designed to
 simply keep you coming back for more and more, while other **programs track**every click you make so that they have more information to sell you ads. Anyway,
 it's a **double edged sword**. It can be used for good and evil, just like most things
 in this world. So for some, the goal may be to **simply make money**. I'd like to
 take a more optimistic outlook than that."
- c. "To train students to be **creative problem-solvers in any computational or software-development field,** either hands-on or theoretical."
- 5. What qualities does every CS student have?
 - a. "I'm not really sure if there are qualities every student has as it's kind of an eclectic mix. I've seen some students who don't try, others who are geniuses and don't even have to try to do something good, and a big group in between who are still learning and actively trying to understand. I would say a lot of CS majors tend to be the more introverted or private, yet amongst themselves they are very much outgoing and have a community. There are many online connections between CS majors through things like Discord or other platforms, which I'm not sure if such usage exists amongst other majors as prevalent."
 - b. "CS students tend to have a **very strong opinion on macros**, the **best**programming language (especially strong opinions regarding Python. I don't

- enjoy it, but people are entitled to their opinions), and the way that code should be formatted."
- c. "CS students have to be very **persistent and not give up very easily**. Debugging easily takes as much time as anything else while I'm doing a project. Code never runs right on the first try. There's always some error, be it syntax or logic."
- d. "Perseverance, dedication, and the ability to search for and find solutions to problems that they haven't solved."