**Survey Questionnaires**

**Pre-Mentoring Survey Questionnaires:**

What is your Gender?

* Male
* Female

Which origin do you closely identify yourself in – Hispanic, Latino, or Spanish?

* Yes
* No
* Other (Please specify):
* Prefer not to say

How would you best describe yourself?

* American Indian or Alaska Native
* Asian
* Black or African American
* Native Hawaiian or Other Pacific Islander
* White
* Other (Please specify):
* Prefer not to say

Q1: Are you a Computer Information Technology (CIT), Computer Science, Informatics, or Electrical Engineering student?

Answer: [yes/no answer]

**Computing Career Inspiration**

Q1A1: If yes, which factors do you feel contributed to your decision to pursue a major in the Computing field? [yes/no answer]

* My parents encouraged me to pursue a Computing career
* I liked Computing TV shows, videos, and/or books
* I know someone of my gender outside my family with a Computing career
* I know someone of my race/ethnicity outside my family with a Computing career
* I wanted to have a Computing career when I grew up
* I often saw shows/movies that featured people of my gender with a Computing career
* I often saw shows/movies that featured people of my race/ethnicity with a Computing career
* I don’t think people like me had Computing careers
* At least one of my parents (or siblings) had a computing career
* Others, please specify

**Computing Identity:**

Q1A2: Please indicate your level of agreement (using a scale ranging from 1 = strongly disagree to 5 = strongly agree) with the following statements:

* I feel like I identify as a computing professional
* I feel like I am part of a Computing community
* I have a passion for my Computing coursework/curriculum content
* My hobbies and interests are often Computing relates
* I read for pleasure about Computing
* I like to talk to my friends and /or family about Computing
* Doing Computing is cool
* My personal abilities/talents are a good “fit” with requirements in Computing.
* I am certain that I am going to pursue a Computing career
* I see myself as a Computing person
* Computing careers are too hard

**Sense of Belonging:**

Q1A3: Please indicate your level of agreement (using a scale ranging from 1 = strongly disagree to 5 = strongly agree) with the following statements:

|  |
| --- |
| * I feel like I ‘belong’ in my Computing program. |
| * I feel that I am a member of my Computing program. |
| * I feel comfortable/welcomed in my Computing program. * People in Computing accept me. |

* My Computing program is supportive of me.
* People like me belong in Computing careers.
* Other people I know see me as a Computing person.
* If given the choice, I would choose the same program over again.
* I feel like an outsider in Computing.
* People in my Computing classes are a lot like me

**Persistence Intention:**

Q1A4: Since declaring or planning to declare your computing major, have you seriously considered changing to a non-computing major?” and responded with either “yes” or “no”.

Q1B: If not, do you consider computing as a major in the future?

* Q1B1: If yes, why and do you perceive any barriers?

**Barriers:**

Please indicate your level of agreement (using a scale ranging from 1 = strongly disagree to 5 = strongly agree) with the following statements):

Studying Computing degree, I will probably face…

Internal:

* …Not being as smart as other students
* …Not having enough confidence
* …Not fitting in
* …Not being prepared enough (e.g., missing pre-requisite)

External:

* …Teachers will think I am not as smart as other students
* …Being treated differently because of my gender
* …Being treated differently because of my race/ethnicity

Others, please specify.

* Q1C: If no, why not?
* too hard
* too expensive
* needs too much schooling
* others

**For everyone:**

**Academic Engagement:**

Q2: Please indicate your level of agreement (using a scale ranging from 1 = strongly disagree to 5 = strongly agree) with the following statements):

* I am motivated towards my studies.
* I expect to do well in my classes.
* I try to make connections between what I learn from different parts of my classes.
* I put a lot of effort into the work I do.
* I use feedback on my work to help me improve what I do.
* I can recognize my own academic limitations and areas where I need help
* When I realize/d I need help, I seek/sought assistance from available resources such as peers, tutors, classmates, faculty, TA’s, or mentors.

**Self-Efficacy/Growth-mindset:**

Q3: Please indicate your level of agreement (using a scale ranging from 1 = strongly disagree to 5 = strongly agree) with the following statements):

* I am confident that I can earn a ‘B’ or better grade in all my courses
* I am confident that I can complete my undergraduate degree (in e.g., computing)
* I will be able to achieve most of the goals that I have set for myself.
* When facing difficult tasks, I am certain that I will accomplish them
* In general, I think that I can obtain outcomes that are important to me.
* I believe I can succeed at any endeavor to which I set my mind.
* I will be able to successfully overcome many challenges.
* I am confident that I can perform effectively on many different tasks.
* I am confident I can understand the most difficult concepts taught in my classes
* Compared to other people, I can do most tasks very well.
* Even when things are tough, I can perform quite well.
* With the right amount of effort/dedication, anyone can become a top computing scholar
* Being a top scholar in computing requires a special ability that just cannot be taught

**Post-Mentoring Survey Questionnaires**

What is your Gender?

* Male
* Female

Which origin do you closely identify yourself in – Hispanic, Latino, or Spanish?

* Yes
* No
* Other (Please specify):
* Prefer not to say

How would you best describe yourself?

* American Indian or Alaska Native
* Asian
* Black or African American
* Native Hawaiian or Other Pacific Islander
* White
* Other (Please specify):
* Prefer not to say

Q1: Are you a Computer Information Technology (CIT), Computer Science, Informatics, or Electrical Engineering student?

Answer: [yes/no answer]

If the answer is yes:

**Computing Identity:**

Q1A1: I feel like I identify as a Computing person

Answer prompts:

* My answer was previously yes, now also yes
* My answer was previously yes, now no
  + Why do you have a change in your perceptions
* My answer was previously no, now yes
  + Why do you have a change in your perceptions
* My answer was previously no, now also no

**Sense of Belongingness:**

Q1A2: I feel like I ‘belong’ in my Computing program.

Answer prompts:

* My answer was previously yes, now also yes
* My answer was previously yes, now no
  + Why do you have a change in your perceptions
* My answer was previously no, now yes
  + Why do you have a change in your perceptions
* My answer was previously no, now also no

Q1B: If not, do you consider computing as a major in the future?

Answer prompts:

* My answer was previously yes, now no
  + Why do you have a change in your perceptions
* My answer was previously no, now yes
  + Why do you have a change in your perceptions
* My answer was previously no, now also no

**For Everyone:**

**Academic Engagement:**

Q2: I am motivated in my studies and I put a lot of effort into the work I do.

* My answer was previously yes, now also yes
* My answer was previously yes, now no
  + Why do you have a change in your perceptions
* My answer was previously no, now yes
  + Why do you have a change in your perceptions
* My answer was previously no, now also no

**Self-Efficacy/Growth-mindset:**

Q3:

Q3a: I believe I can succeed at any endeavor to which I set my mind.

* My answer was previously yes, now also yes
* My answer was previously yes, now no
  + Why do you have a change in your perceptions
* My answer was previously no, now yes
  + Why do you have a change in your perceptions
* My answer was previously no, now also no

Q3b: I will be able to successfully overcome many challenges.

* My answer was previously yes, now also yes
* My answer was previously yes, now no
  + Why do you have a change in your perceptions
* My answer was previously no, now yes
  + Why do you have a change in your perceptions
* My answer was previously no, now also no

Q3c: With the right amount of effort/dedication, anyone can become a top computing scholar

* My answer was previously yes, now also yes
* My answer was previously yes, now no
  + Why do you have a change in your perceptions
* My answer was previously no, now yes
  + Why do you have a change in your perceptions
* My answer was previously no, now also no

**Mentoring:**

Q4: Thinking about your experience being mentored in CIT 21400, please indicate your level of agreement (using a scale ranging from 1 = strongly disagree to 5 = strongly agree) with the following aspects of mentorship:

* I had a very positive mentoring experience in CIT 21400
* The mentor modeled how to overcome challenges and reach personal goals
* The mentor showed me how to treat failed attempts as a learning experience
* The mentor gave me the sense that s/he and I shared similarities in background, personality, or other important personal characteristics.
* The mentors helped me overcome insecurities about my abilities as a Computing degree major student, if I had any.
* The mentors helped me explore resources to succeed academically

Do you recommend any changes in our mentoring practices in CIT 21400?

**Mentor Survey Questionnaire**

Please indicate your level of agreement (using a scale ranging from 1 = strongly disagree to 5 = strongly agree) with the following statements):

Q1: Being a mentor was a valuable experience for me.

* Why or why not?

Q2: I gained knowledge about being a mentor

* Please specify and provide examples of what you learned.

Q3: The mentoring experience will help me in my future career.

* If you believe the mentoring experience will help your future career, please explain how.

Q4: I believe I was able to improve students’ sense of belonging in computing

Q5: I believe I was able to improve students’ self-efficacy

Q6: I believe I was able to improve students’ academic engagement

Q7: I believe I was able to encourage students to join computing programs by showing this is a viable career option for them

Q8: I believe I was able to demonstrate how to navigate challenges by sharing experiences, resources, and strategies

Q9: I was able to show how to treat failed attempts as a learning experience

Q10: If you serve as a mentor again for CIT 21400, would you implement anything differently?

Q11: Do you recommends any changes for CIT 21400 mentoring initiatives.