

Cougar Initiative to Engage (CITE)



Nouhad Rizk

<https://uh.edu/nouhadrizk>

University of Houston

Minnie Stevens Piper Foundation

Know all men by these presents, that the Board of Directors
of the Minnie Stevens Piper Foundation has conferred upon

Douhad Jean Rizk, Ph.D.

Instructional Professor of Computer Science
University of Houston



the title of

Piper Professor of 2022

for outstanding Scholarly and Academic Achievement.

Given in San Antonio in the State of Texas, this the second day of May, 2022.

Joyce M. Ellis
Executive Director

Jacinto Arrellano
Assistant Director

My Goal (s)??



Teaching goals and objectives

- To contribute to the teaching and achieving of core performance standards and outcomes - To improve students' behavior
- To develop students' character
- To instill Positive Action principles into students' cognitive, affective and behavioral learning domains

And...



Develop student's problem solving' skills through competitions

- Competition brings a variable into the equation that shifts the participants attention from the task itself to attention to the cost of their performance in the task
- When competitive goals are present, groups tend to place increased value on the outcome of the effort and tend to decrease their focus on the process
- Can provide a dimension that potentially reinforces group interdependence and/or team skills
- Potentially increases the level of fun and/or drama in an activity



Boost my students' self-esteem and confidence

- **Increase sense of self learning ownership by recording YouTube videos**
- **Praise and acknowledge accomplishments: use a reward system**, giving points to students who answer questions in class or who submit projects quickly, which shows the students that being actively engaged is beneficial
- **Embrace a growth mindset: giving them additional work as extra where they implement their own rules.**





Gamificatio n

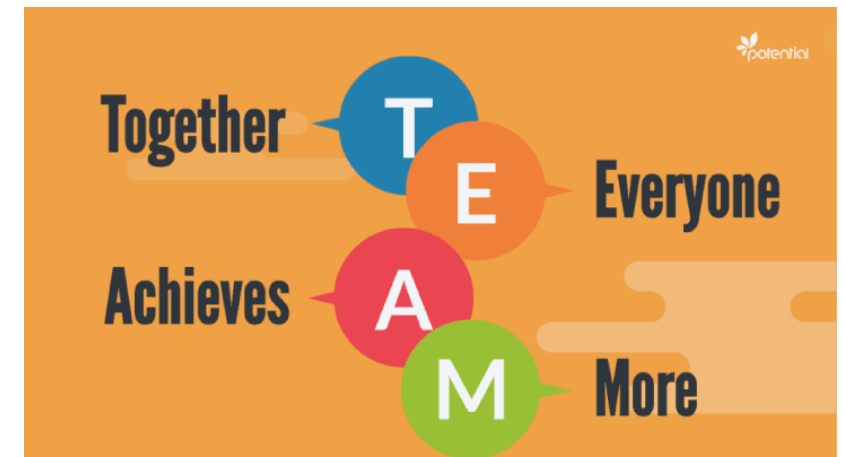
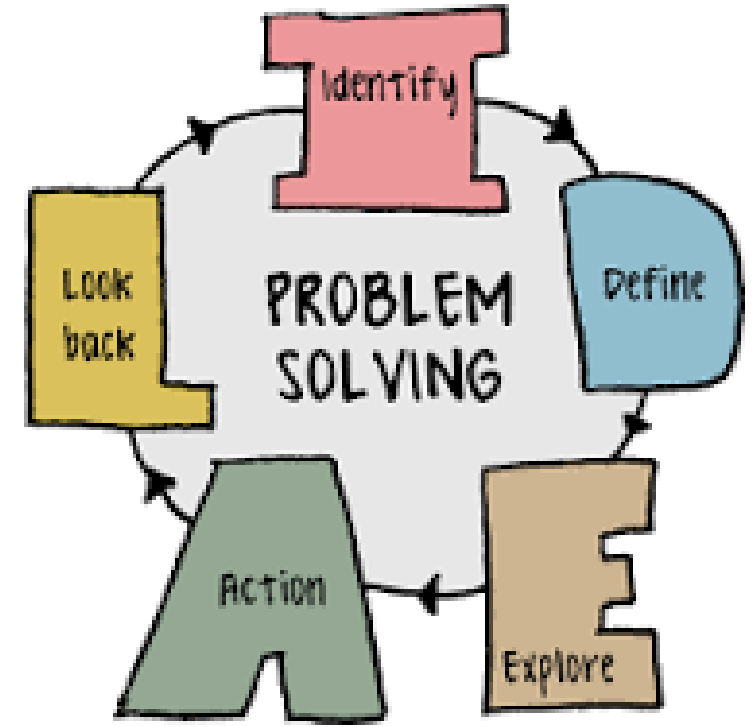
- To assess student learning, I use a variety of methods, including less traditional approaches like **interactive games**. Doing clicker games for a weekly quiz or for a test review, for example, is much more interesting to the students and increases their attention and student-teacher interaction opportunities.
- have competitions in class with the material using games like Who Wants to be a Millionaire and Jeopardy, so that students can have fun with the knowledge they develop in the classroom and to push their intellectual boundaries more

Co-Curricular Programs

1. Consulting Clinic (**Help Community**)
2. Women Coding for Success (**industry vs Women Retention @UH**)
3. Women Empowerment Booster (**Help Young female and college-aged female**)

1-Consulting Clinic => Software Development Practices

- The University of Houston Computer Science CS Consulting Clinic (CSCC) is a practicum program in which second and third year STEM students, under the direct supervision of Dr. Rizk, **assist Houston-area entrepreneurs and nonprofit organizations** by aiding in implementing the technological solution as an end-product.
- Focusing on student learning outcomes:
 - Problem solving skills
 - Teamwork



2-Women Retention @UH

Partnership with industry
Service Learning
Connection

Pandemic

The Computer Science
Department presents:

WOMEN CODING FOR SUCCESS

Friday, March 20th
PGH 563

9:00AM

YOU MAD?
TWITTER SENTIMENT ANALYSIS
USING MACHINE LEARNING
PRESENTED BY MONICA TRAN

10:30AM

AWS DEEPLENS
BASKETBALL REFEREE
PRESENTED BY SOFIA THAI

12:00PM

Q&A PANEL (LUNCH PROVIDED)

1:00PM

HANDS-ON SENTIMENT ANALYSIS
WITH MACHINE LEARNING
MODELS

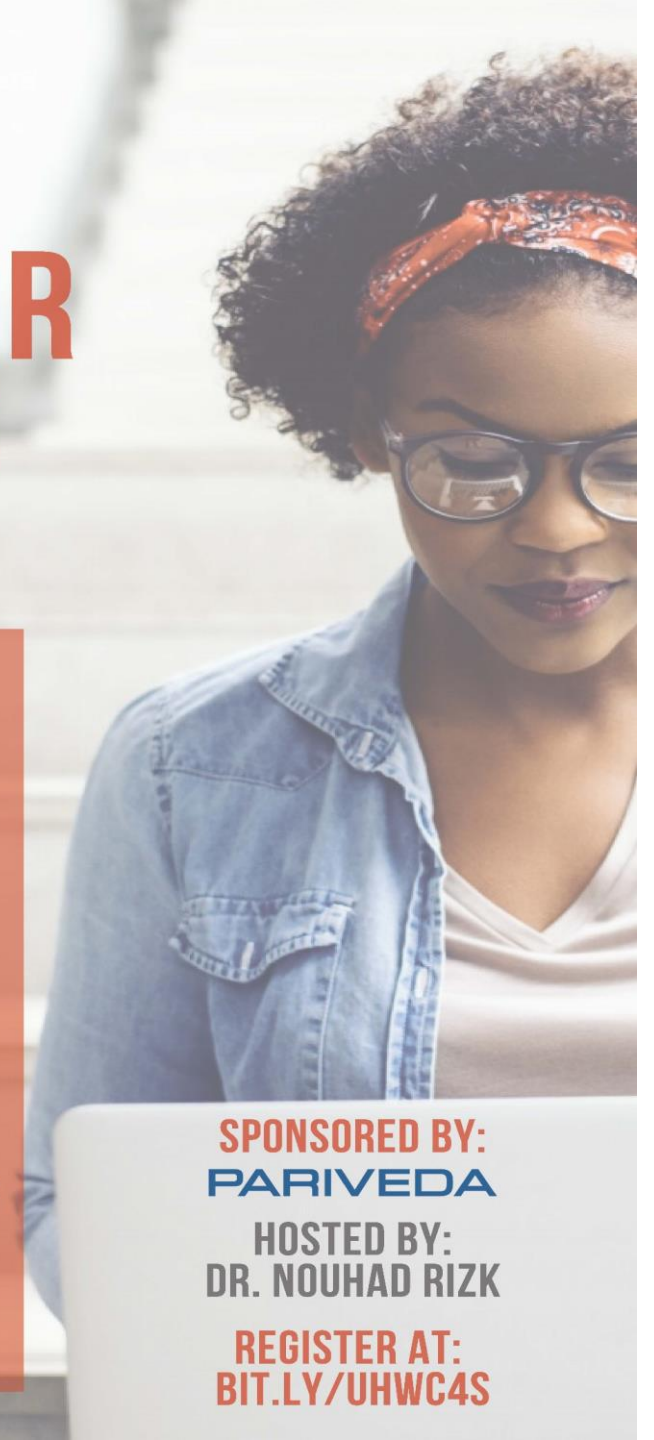
3:00PM

CLOSING

SPONSORED BY:
PARIVEDA

HOSTED BY:
DR. NOUHAD RIZK

REGISTER AT:
BIT.LY/UHWC4S



3-Women Empowerment Booster

- Partnership with underrepresented in school
- Social responsibility
- Problem solving



Social Responsibility in Computer Science



Computer science is NOT only problem solving

Computer Science can positively affect society

Social Awareness

- Pay close attention to the development of the social and emotional skills that allow students to persevere when working on difficult tasks, regulate emotions, and work effectively in teams.
- interpersonal (**social such as teamwork**) and intra-personal (emotional such as self-regulation (*regulate* reactions to strong emotions like frustration) /grit(**perseverance** and passion for long term goal) competencies, as well as higher-order cognitive competencies such as **creativity**(self-reports or teacher judgments via surveys).

Intercultural Communication

- Social emotional skills competencies will be developed through **experience in school** and in involvement in **other environments** such Middle and high school
- How to adjust instruction or programs in response to social-emotional assessment information and on **data on students' school and out-of-school environments.**
 - **Neighbors school vs other schools**
 - **Middle school student's vs high school**

Connecting Civic Knowledge and Responsibility

- Universities can play an important role in catalyzing increased civic engagement, by helping young people develop and practice the knowledge, beliefs, and behaviors needed to participate in civic life (such as volunteering, participating in group activities).
- WEB can provide opportunities for civic engagement by connecting young and college aged females.

Civic Communication

- Volunteering
- Providing good role models for youth is a critical factor in their success later in life.
- Support National Nonprofit Organizations (Consulting Clinic)

Connecting Learning and Engagement

- Participated in mutually beneficial community activity and clearly articulates what was learned through the engagement experience
- Develop their own programs and their own posters

Community Action and Reflection

- WEB helps youth become empathetic citizens who could potentially continue similar work when they become adults.
- Youth who give back to their communities develop leadership skills, learn the importance of helping, and gain work experience.

My role as instructor

- Encouraging self-awareness and reflection in group work

Self-awareness



- Encouraging being an Effective Group Member



How you develop students' skills in teamwork

- **Clarify Your Roles.** Within a team, everyone should also understand their responsibilities.
- **Manage Time Efficiently.** ...
- **Share Enthusiasm.** ...
- **Exercise Together.** ...
- **Establish Team Rules And Purpose.**
- **Self assessment**



Encouraging self-awareness and reflection in group work

- **“Are We a Team?”**

- We all show equal commitment to our objective.
- We all take part in deciding how work should be allocated.
- We are committed to helping each other learn.
- We acknowledge good contributions from team members.
- We handle disagreements and conflicts constructively within the team.
- We can give constructive criticism to one another and to accept it ourselves.
- We all turn up to meetings and stay to the end.
- We are good at making sure that everyone knows what’s going on.
- When one of us is under pressure, others offer to help him or her.
- We trust each other.
- We remain united even when we disagree.
- We support each other to outsiders.
- We feel comfortable and relaxed with one another.



Being an Effective Group Member

- Communication skills
- healthy group climate
- effective group process

Communicate by discussing any problem

Do not blame others

Support group ideas

No bragging just be a mentor

Listen actively

Get involved by helping



Collaboration



Teamwork





**HOUSTON
FIRST**

How do you find community partners?

- Houston First !
- Starting with **our neighborhoods:**

1-nonprofit organizations

2-schools / I am myself a volunteer

Manage the complex logistics

- Apply smart Management technique → Agile

- 1- I introduce them

- 2- limit the communication by understanding everything in one meeting and one follow up meeting.

- 3- Update after each step

In WEB, you are working with high school and middle school students and their teachers as well as UH students. How do you balance the needs of these groups?

- I am like a **hub** for everybody (and the effective center of all activities), but my strongest point is leadership and I know how to delegate
 - 1- meet with Microsoft, organize seminars on culture response and interviewing
 - 2- meet with professors at high and mid schools
 - 3- meet with my mentors

How do you manage expectations for partners and students?

- Partners are always winners, free software and free education, free service and they appreciate the care of University of Houston through us → low expectations might be high for them
- Help my students to develop self-confidence, especially that they represent the university through the consulting clinic → high expectations

Describe a change that you've made in response to feedback from your partners.

- **The most important change is to**
 - 1. Limit the requirement meeting to one**
 - 2. Clarify the final goals ahead by let them sign a statement of work (expectations)**

Describe a change you've made in response to feedback from your students

- Students' communication with real customers is difficult to manage it is not a homework well described and goals are well defined
- One student lead communicates with the customer
- Clarify what is volunteering
- Put a deadline for the end of the project

Climate

- What have you enjoyed the most/the least about getting to know your group members?
- How is your attitude towards your group members demonstrated in how you function within the group?
- How do you demonstrate trust and openness towards the other members and their ideas?
- Do you give honest opinions? If not, why not?
- How much do you feel you can rely on your group members to complete the required task(s)?
- How do you make sure that group members feel supported, encouraged, and appreciated for their work?
- How does the team ensure that all voices are heard?
- Do you participate willingly in the discussion? If not, why not?
- Do others appear to understand your ideas? If not, why not?
- What do you do if another person's ideas are unclear?
- What do you focus on when others speak? How could you improve your listening skills?
- How do you respond to others' ideas? How do they respond to yours? What could be improved?

Process

- What are your group's ground rules and goals? What changes to these rules and goals might improve the functioning of your group?
- How is everyone encouraged to stay accountable to the tasks they have been assigned?
- To what extent do you and others follow the feedback methods laid out in class? How could you and your group members improve the way you give and receive feedback?
- To what extent does your group reflect on how well its goals are being achieved? How would more (or less) discussion about goals help or hinder your group's functioning?
- How are decisions made in your group? Who is involved and in which ways? What has been effective about the processes you have used? How could your decision-making processes be improved?
- What happens if a group member is unhappy or uncomfortable with a decision made by the group?
- What conflicts have arisen within your group? How (if at all) have the conflicts been resolved? What role do you play in resolving these conflicts? What could you (or others) do to improve your group's ability to deal productively with conflict?
- How do your meetings typically proceed? What do you accomplish and in how much time? What is effective about your group functioning during meetings? What changes would improve your meetings?
- Who has emerged as the leader in your group? Which other roles do you see team members playing? Which role(s) do you play? Which role do you prefer and why?