

# ***ECE 09.461***

# ***PROFESSIONALISM &***

# ***CONSULTING IN ENGINEERING***

## ***LECTURE 2***

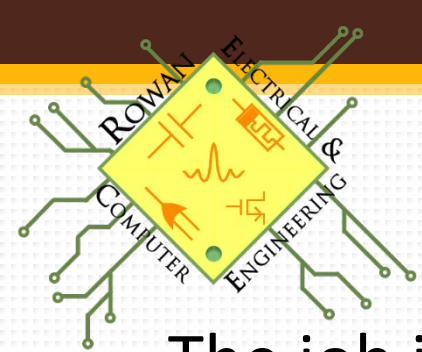
*MASTERING THE ART & SCIENCE OF*

## ***INTERVIEWING***

***DR. ROBI POLIKAR***

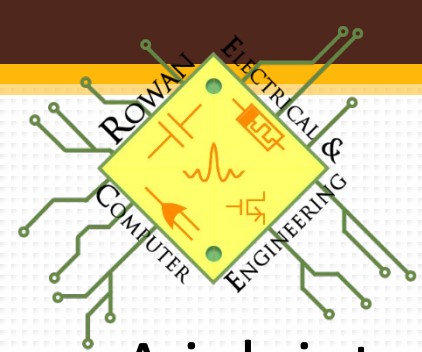
*ELECTRICAL & COMPUTER ENGINEERING*





# THIS WEEK IN P&C

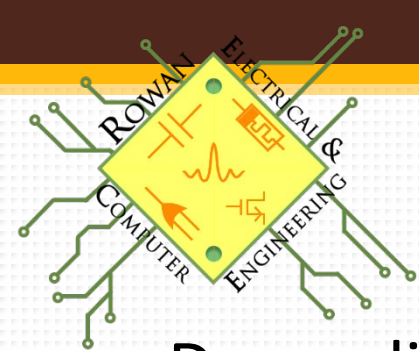
- The job interview
  - Layers and stages of a job interview
  - Pre-interview preparing & planning
  - The interview
    - Planning
    - It is go time!
    - Answering the questions / Common (and tough) questions
    - The STAR method
    - The last question
- After the interview



# JOB INTERVIEW

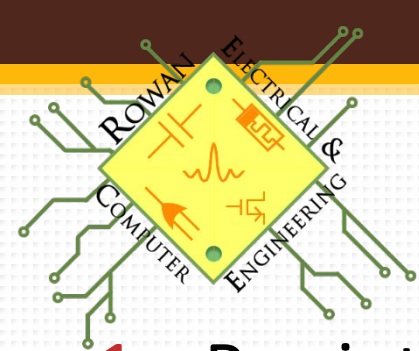
- A job interview is one of the most critical components of your professional career.
  - It is the second – and the more difficult – hurdle after clearing the resume review.
  - It is not just a mechanism for the employer to find the right employee, but also for you to find the right employer.
- The job interview is a process; it does **not** start when you walk into the room and does **not** end when you walk out.
  - A successful job interview starts with thorough planning and preparation and continues with further interaction/communication after the interview meeting itself.
- Most people think that they are good at interviewing.
  - Most of them are wrong – often catastrophically so!





# LAYERS OF INTERVIEW

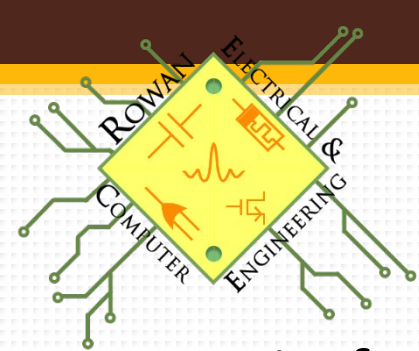
- Depending on the company and the job, you may go through several layers of interviews:
  - **Technical interview** – to test whether you have the right background, knowledge, and skills to do the job. This is essentially an oral (and sometimes even a written) exam. There may even be multiple such technical interviews. Technical interviews are often given by supervisors, managers, and other technical staff.
  - **Behavioral interview** – to determine whether you are the right kind of person, who shares the company's values and culture, whether you have the right attitude, whether you are a true team player, whether you can work under pressure, etc. Behavioral interviews are often given by HR personnel who are specialized in evaluating / profiling people, and it is the harder of the two main types of interviews (where more people are eliminated).
    - **In this class, we will focus on the behavioral interview.**



# THREE STAGES OF THE INTERVIEW

1. Pre-interview – Steps you need to take, the research you need to make, the preparation you need to complete long before you step into the interview room.
2. During the interview – Knowing what to say and when (and perhaps more critically, what not to say), reading the room and the interviewer, conducting yourself professionally, having the right body language and gestures.
3. After the interview – Following up with a thank you note, or additional information that might have been requested, keeping the company posted with any other employment decision you take



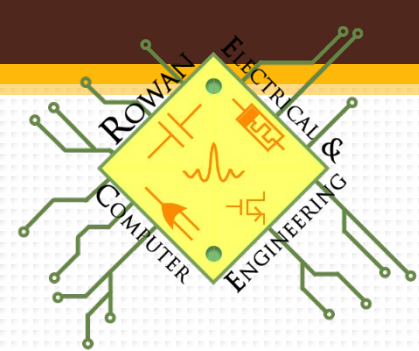


# PRE-INTERVIEW PLANNING

- 90% of applicants skip or do not pay proper attention to this step, yet this is the most critical part. The vast majority of applicants are eliminated because they skip this step.



- Before attending an interview, you must **thoroughly** research the company, the job description, and the industry in which that company operates.
- You must prepare answers to commonly asked questions from the perspective of that company and the industry in which they operate.
- Just like you must have a different resume for each job you apply to, your answers to even the most common questions should also be different for each interview



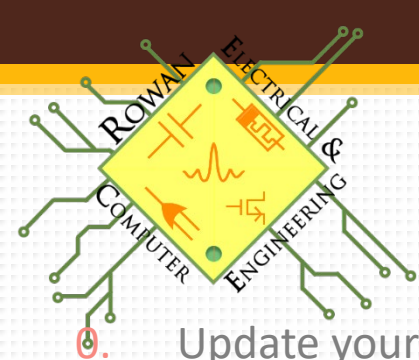
# THIS DID HAPPEN!

Actual snippet from an interview in January 2025 at Inductotherm



**Interviewer:** So, what do you know about us?

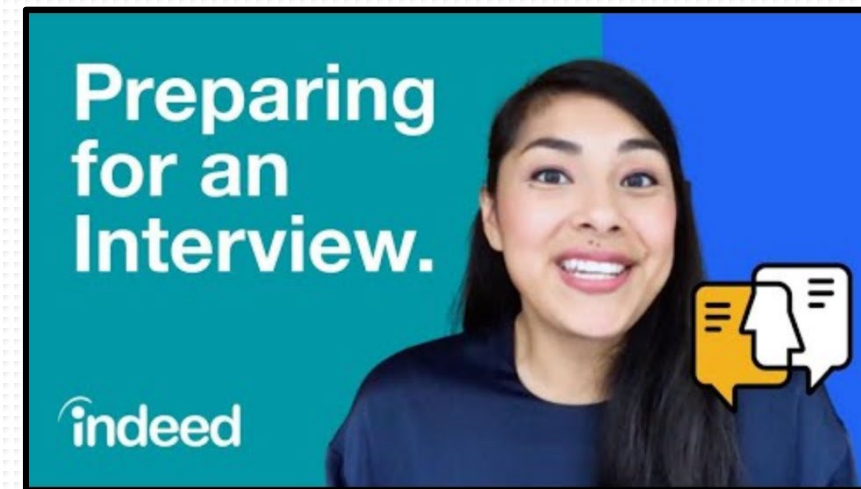
**Rowan Engineering student:** You guys heat stuff up, right?



# PRE-INTERVIEW STEPS

## PART I: RESEARCH

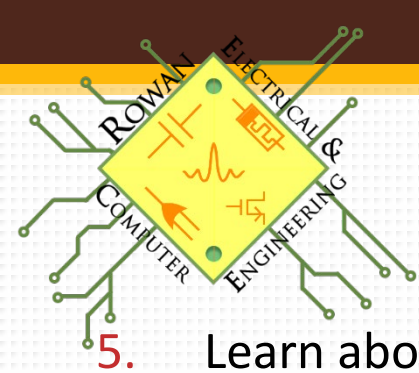
0. Update your LinkedIn profile. Make sure that it is professional (you've already done this, right?)
1. Carefully (re)read the job description
  - Learn the qualifications, qualities, the background that are needed.
  - Align yourself with respect to the job description – how do your experience/skills match the requirements?
2. Answer this question: Why do I want this job?
  - What is the specific draw? Why do you feel you are uniquely qualified?
3. Research and learn everything you can about the company
  - What is/are their line(s) of business? What are their products and services?
  - Learn the company's history, triumphs and failures, high and low points
  - Find out about the recent news, their industry positions, their stock price, shareholders, and investors (if applicable)
  - Find out about the company's mission/vision, credo, values, and culture
4. If you know who the interviewer will be, learn everything you can about him/her (you can ask who that person will be)
  - Search their LinkedIn profile, webpage, current and prior roles in the company



<https://youtu.be/qpkegRmPgis>

**Pro-tip:**  
Strategically integrate what you learned into your answers during the interview.



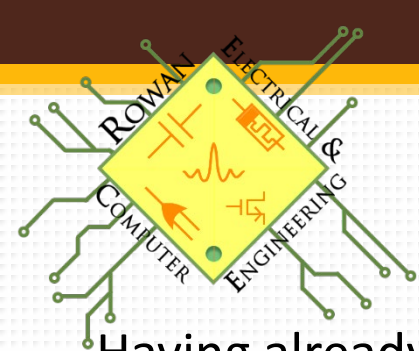


# PRE-INTERVIEW STEPS

## PART II: PREPARE

5. Learn about the common questions, and prepare your answers to those questions in light of best practices for those questions
  - Strategically weave the knowledge you have gained during the research phase into your answers.
  - Learn and practice the STAR method: situation, task, action, result (more on this later)
6. Practice, practice, practice, and then practice some more
  - Record and then watch yourself – pay attention to body language, speaking voice and your smile
  - Conduct mock interviews with trusted family, friends, advisors
7. Prepare thoughtful questions for the interviewer
  - Ensure that the questions are well-thought, indicating your interest in the position and the company, a typical day on the job, the company's future plans and how you may fit into those plans, professional development opportunities, etc.





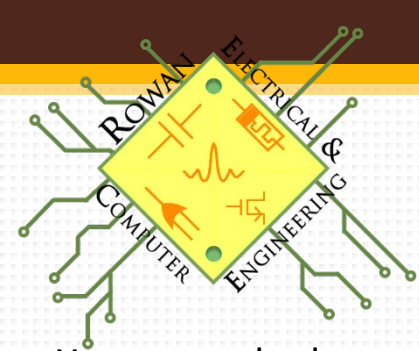
# THE INTERVIEW

## PART I: PLANNING

Having already done the pre-interview research, you now need to prepare for the actual event itself.

- Find the location / address of the interview
  - Plan how you will get there, how long it takes, whether there is parking, public transportation, etc. Practice your route.
  - Plan to arrive at least 10 minutes prior to scheduled interview time
- Get your documents in order
  - Have a copy of your resume (\***that**\* one!), transcript, certificates, your notes, company literature, and other relevant document that may be necessary
- Professional attire
  - Take a shower in the morning, use deodorant if necessary; hair/nails should look clean/trimmed and well attended to
  - Have a business formal interview suit that is also dry-cleaned and pressed, have shoes polished
  - If possible, have a back-up suit, at least a shirt, etc.





# THE INTERVIEW

## PART II: IT IS GO TIME

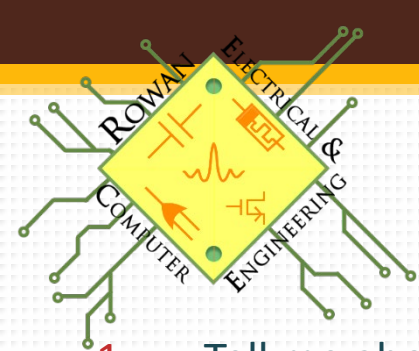
You researched, you rehearsed, and you are prepared; time to impress the interviewer. Do the following – and in this order:

1. Walk into the room with a natural **SMILE** – learn to have a natural smile. Also smile often during the interview when appropriate, but switch to a serious tone when called for. *Men (and women, if wearing suit jackets): Make sure that your suit jacket is buttoned (top buttoned only), and remains buttoned when you are standing up.*
2. Give the interviewer a **FIRM HANDSHAKE** – not a wimpy one, but do not overdo it: no one likes their hand crushed, while...
3. Make **EYE CONTACT** – look at the interviewer in the eye when shaking hands (and as appropriate when talking), ~ 1-3 seconds at a time.
4. Have a relaxed, open, and inviting posture: **BODY LANGUAGE** – continue this posture throughout the interview, use your hands and arms as appropriate.
5. **SIT DOWN** only when asked (in words or a gesture). Unbutton your suit jacket while sitting down.

During the interview:

- **NEVER** look at your watch, or anything else for that matter, in the room. Always face the interviewer, making frequent and subtle eye contact.
- **DO NOT** FIDGET – if you are too nervous, use a pen as a prop (but only if you must)
- Project confidence and competence by effective use of **VOICE MODULATION** – Adjust the volume, pace, tone and even pitch to convey meaning, emphasize important areas, create emotion and excitement, for a more engaging conversation.
- Use **BODY LANGUAGE** to further draw your interviewer into your answer, and also to avoid filler words



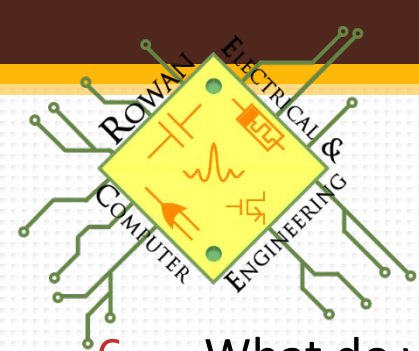


# PART III: ANSWERING THE QUESTIONS

## COMMON (AND TOUGH) QUESTIONS

1. Tell me about yourself / Walk me through your resume / Tell me something about yourself that is not on your resume / Tell me your story that brought you here today
  - Past experiences and achievements ↔ job description; highlight strengths / positive personality; past → present → future
2. What interests you in this position? / Why do you want to work for us? / Why do you think you would be a good fit for this position? Why do you want this job? (Also see #6)
  - Relate a true experience, memory, interest or your value to the specific job, position and/or the company you are interviewing. You cannot answer this question correctly unless you have already done your research about the company/position first!
3. What are your strengths? / What praise do you receive most often?
  - Make sure that your answer relates to the job/position
4. What are your greatest weaknesses? / What critical feedback do you receive most often? / What regrets do you have in your professional career?
  - Self-awareness and continuous improvement; avoid fake weaknesses (overachiever, perfectionist, etc.).
  - To the extent possible list weaknesses/regrets that are least relevant to job, and/or those in which you have made demonstrable improvement.
5. Tell me about a time when \_\_\_\_\_ (overcame obstacle, faced a dilemma, made a mistake, solved a problem, disagreed with your supervisor / colleague, was under a tight deadline / stress, etc.)
  - Classic interview questions in which to use the **STAR** method: Situation, Task, Action, Result

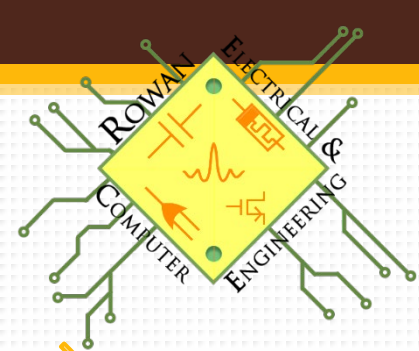




# PART III: ANSWERING THE QUESTIONS

## COMMON (AND TOUGH) QUESTIONS

6. What do you know about us? / Which specific line of our businesses are you most interested in? / What do you think our primary mission is? / What do you see the role of our company in this industry? If you were the CEO of this company, what would be your priority?
  - These questions are all designed to see whether you have done your homework and researched the company.
7. Why should we hire you? / What makes you the best candidate for this position? / What is your superpower?
  - A most critical question: this is where you need to differentiate yourself from all other candidates. Describe how your experience, knowledge, skills, attributes, values align perfectly with the the job description as well as company mission / vision / values / credo.
8. What is your definition of (professional) success? How do you define success? Your goals for the future?
  - List a few goals, achievements, or accomplishments – if realized in 3~5 years – you would consider yourself successful. These should relate to the job / position / company. These can also relate to personal growth.
9. How do you handle stress / conflict / pressure / challenging situations?
  - Talk about planning and prioritizing to avoid and/or mitigate stress and pressure; using communication skills, being calm and transparent to avoid and/or mitigate conflict and other challenging situations. Use the STAR method to give examples.
10. What was your last salary? What are your salary expectations?
  - The former is an illegal question; the latter is not. Know the range for that position / geographical location / experience levels; then provide a reasonable range based on your specific skills and experience. Always indicate that are open to negotiation, and you would also consider other tangible and non-tangible benefits.



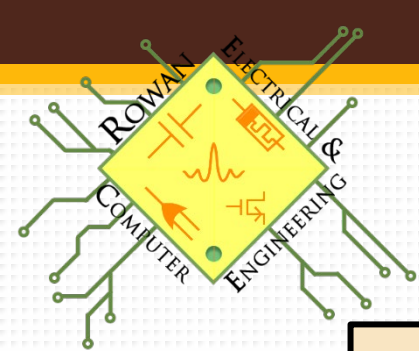
# THE STAR METHOD

**S** **Situation** Set the scene by describing a specific situation you faced. Provide relevant background and context

**T** **Task** As a result of this situation, what (tasks) did you need to accomplish? Highlight relevant challenges, constraints, deadlines, and expectations

**A** **Action** What exactly did you do to accomplish those tasks? Highlight teamwork, your leadership, initiatives, integrity, ethical and professional judgment

**R** **Result** Describe the outcomes, what happened at the end? Highlight achievements, benefits, rewards, improvements, cost savings, etc.



# USING THE STAR METHOD

CareerAddict®

## 10 TIPS

### FOR USING THE STAR METHOD

1. Understand the question
2. Be specific and quantitative
3. Focus on your own contributions
4. Prepare in advance
5. Use relevant examples and experiences
6. Be concise
7. Highlight your achievements
8. Be honest
9. Keep it positive
10. Be relatable

S

T

A

R

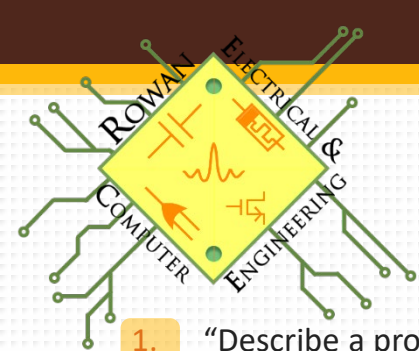
SITUATION

TASK

ACTION

RESULT

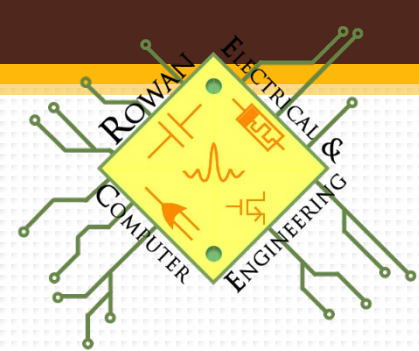
- Use the STAR method when you are asked to share a specific example, situation, problem, competency, or problem solving
- These 10 tips:
  - ... require that you are prepared to talk about a specific scenario, and that
  - ... requires that you know which scenario to talk about for which questions, and that
  - ... requires that you know – or at least – anticipate the questions



# USE STAR METHOD WHEN ASKED:

1. "Describe a project you worked on that you enjoyed. Can you share what your role was and how you contributed to its success?"
2. "Describe a time when you went above and beyond at work. Why did you take that initiative and what was the outcome?"
3. "Give me an example of when you set a goal at work and managed to accomplish it."
4. "Describe a time when you had to work under a really tight deadline."
5. "Work can sometimes get hectic, especially during busy periods. Can you describe a time you felt overwhelmed and what you did about it?"
6. "Talk me through your process of ensuring your work gets delivered on time, giving an example."
7. "Have you ever failed to meet a client's expectations? What was the reason, and how did you navigate the situation?"
8. "Have you ever dealt with a customer making a very unreasonable request? Describe how you handled the situation."
9. "Tell me about a time when a client requested last-minute changes. What was your response?"
10. "Can you describe a situation at work that you wish you had dealt with differently?"
11. "Tell me about a time when you had to juggle a few urgent projects at once. What was your method for prioritizing them and managing your time?"
12. "Give me an example of when your interpersonal skills, such as communication and empathy, helped you resolve an issue at work."
13. "Have you ever had to motivate others while working as part of a team? Describe the situation to me."
14. "Describe a time when you had to correct a colleague or manager on something. How did you communicate to them that they were wrong?"
15. "Tell me about a time when a colleague wasn't collaborating well with you and how you handled it."
16. "Tell me about a time when you found yourself in conflict with a colleague. How did you resolve it?"
17. "Tell me about a time when you had to collaborate with someone who had a very different personality to you. How did you make it work?"
18. "Tell me about a time when you experienced a sudden change in the workplace and how you navigated it."
19. "Have you been met with a situation at work that forced you to think on your feet? Describe it for me."
20. "What is your process for addressing and fixing mistakes at work?"





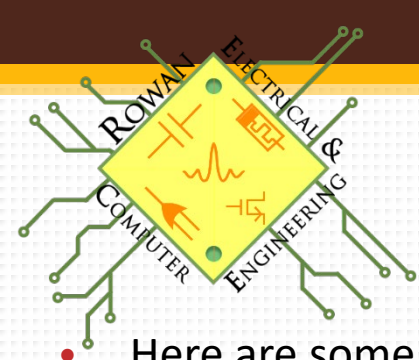
# STAR INTERVIEW WORKSHEET

- Prepare one for yourself
- Or, purchase the template from

<https://www.etsy.com/listing/1584879371/star-method-interview-worksheet>

## STAR INTERVIEW PREPARATION

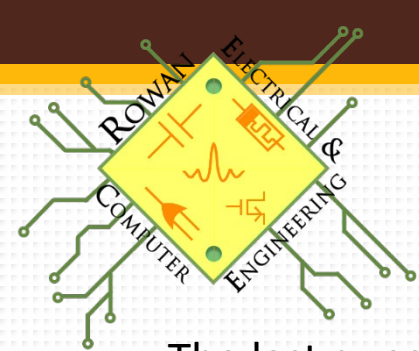
	S	T	A	R
	SITUATION Describe the situation, context, and background	TASK Describe what was required of you	ACTION Describe what you did, how you did it, and tools you used	RESULT Describe what was required of you
Can you describe a situation where you faced a challenging deadline or goal?				
Describe a time when you demonstrated leadership skills.				
Share an example of a time when you took initiative to improve a process or solve a problem.				
Tell me about a time when you had to resolve a conflict within a team				
Share an example of a time when you took initiative to improve a process or solve a problem				
Can you describe a situation where you successfully handled a dissatisfied customer?				



# PART III: ANSWERING THE QUESTIONS

## BRAIN TEASER QUESTIONS

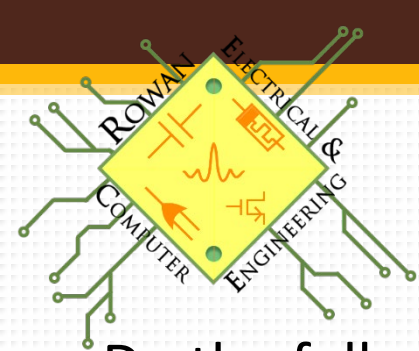
- Here are some brain-teasers.
  - How many windows are there in Istanbul?
  - How many pennies are needed, if stacked on top of each other, to reach the top of the Empire State Building?
  - Here is a \_\_\_\_\_ (red, blue, green, etc.) \_\_\_\_\_ (cube, sphere, pen, etc.). Prove to me that this is not \_\_\_\_\_ (red / cube).
  - How big is this room?
  - How much does this building weigh?
  - How many \_\_\_\_\_ (jellybeans, golf balls, Oreos etc.) would fit in \_\_\_\_\_ (this building, a 747, this box)?
  - How many people in \_\_\_\_\_ (this company / Shanghai / the world) currently use \_\_\_\_\_ (cellphones, computers, TVs)?
  - I have never \_\_\_\_\_ (cooked, built, coded, etc.) anything in my life before. Teach me how to \_\_\_\_\_ (make an omelets, build a staircase, code matrix inversion in Python, etc.)
  - You have \$\_\_\_\_\_. What problem would you try to solve and how? What would invest in and why?
- These questions are asked to test your analytical thinking, and **not** to get an accurate answer.
  - Reword and state the question in your words to ensure that you understood what is asked. Ask clarifying questions to resolve any ambiguity and/or if/when needed .
  - State your assumptions, and why / how you make that assumption
  - Divide complex problems into easier, smaller, manageable parts.
  - Describe your thought process and/or your steps to solve the problem
  - Make reasonable estimates in calculations / computations.



# PART III: ANSWERING THE QUESTIONS

## THE LAST QUESTION

- The last question is almost all interviews – and this is also very critical – is “**Do you have any questions for us?**”
  - This is your opportunity to ask a question about the position, the company, your role, growth potentials, any clarifications to prior questions, or anything else that is important to you about this position
- Choose wisely - the questions you ask should:
  - Show that you were engaged and paying attention
  - Give an opportunity to clarify something or address an issue that was not covered
  - Allow you to learn more about the company values / culture
  - Allow you to make an informed decision.
- Good questions to ask:
  - What is a typical day on the job for this position?
  - What are the company's future plans and how do you see me fit into those plans?
  - What professional development and career growth opportunities are there available for me in this company?
  - What are the biggest challenges in this position?
  - Anything else that is important to you: e.g., What are the benefits? Does your company use animal testing for its products? Do you have tuition reimbursement for life-long learning / graduate school?, etc.
  - What are the next steps in the hiring decision? ← This should be the last question you ask.



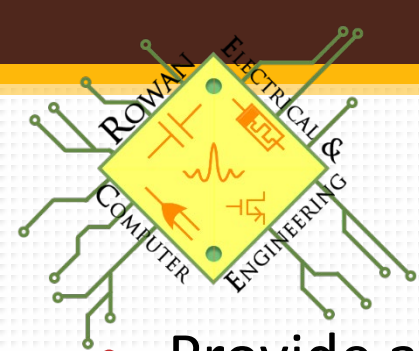
# ENDING THE INTERVIEW

Do the following, and in this order, before leaving the facility:

- At the interviewer's gesture, stand up, give another firm handshake with a natural smile, and thank them for their time and the opportunity for the interview.
  - Remember to button your jacket (top button only) as you stand up.
- (If one is available) Thank the assistant / secretary for their help



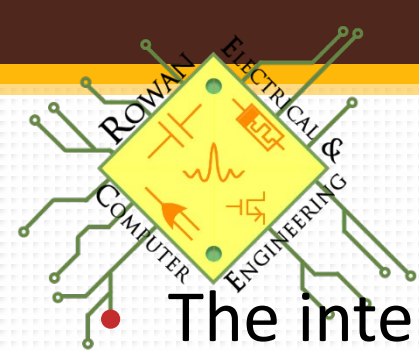




# AFTER THE INTERVIEW

- Provide any other requested information as soon as possible. If professional references are requested, provide advance notice to each reference you list so they are not alarmed if contacted.
- Send a thank you email to your contact or those you interview. Use this e-mail to highlight your strengths or areas from the interview you wish to provide more context.
- Be patient. Remember the hiring process takes time. You can follow up with your point-of-contact (POC) if you have not been contacted within the established timeframe.
- Notify your HR Specialist and POC if you choose to withdraw your application. This may occur as a result of you accepting another job in the time you are waiting for a response or change your mind about being open for consideration.





# RECAP

The interview process consists of pre-interview, interview and post-interview actions. Your goal is to convince the interviewer that you are the right candidate for the job and distinguish yourself from the rest of the candidates.

- Pre-interview

- Research and rehearse
- Prepare for common questions

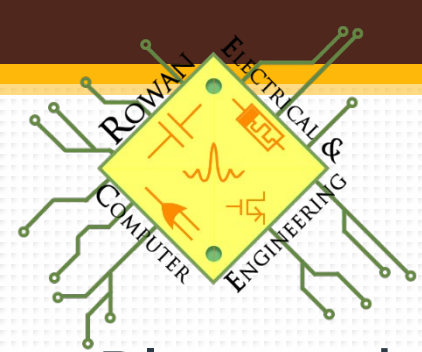
- Interview

- Be on time, properly dressed
- Confidence: natural smile, firm hand-shake, eye-contact, comfortable body language
- STAR method for answering certain questions

- Post interview

- Thank you notes
- References

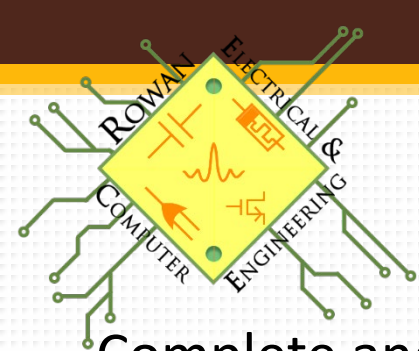




# ASSIGNMENT 0 (B)

Please share your experiences from your prior interviews.

- How did you prepare?
- What questions were asked?
- What were your best practices?
- Any unusual / memorable moments?
- Submit a Word or PDF document.



# ASSIGNMENT 1

Complete and submit the Project Approval and Evaluation Form. Please provide as much detail as possible for

- Narrative Description / Scope of the Work,
- Requirements / Specifications,
- Constraints
- Deliverables, and
- Budget & Resources.

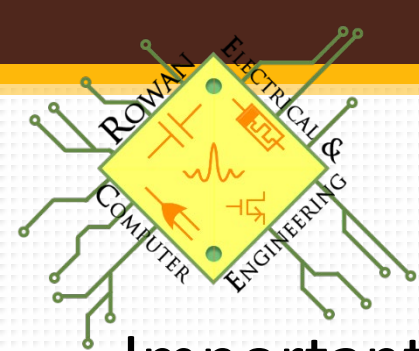
Provide the dates for

- project initiation,
- ordering the supplies/equipment,
- preliminary prototype/solution.

Make sure to sign and obtain the Client's signature on the left side, under Project Initiation.

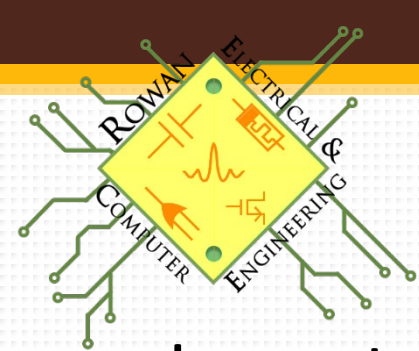
**Attach a Gantt chart.** Lack of a Gantt chart will lead to a loss of points!





# ASSIGNMENT 1

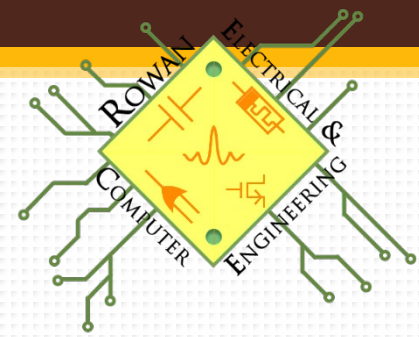
- Important notes on the Project Approval Form:
  - Requirements and specifications:
    - Technical engineering details on what needs to be done and how it needs to be done. They are the specific requirements your design (or approach, or method, or work) must meet.
    - In other words, these are things you **MUST** do to meet the client's needs.
  - Constraints:
    - Limitations and restrictions on how you must meet the requirements and specifications.
    - In other words, these are the things that you **CANNOT** do, or that **LIMIT** you in what / how you do your work.
  - Project deliverables
    - Specific items that you will provide and/or deliver to the client. Do not be vague!
    - A “report” or “advice” without additional clarifications is not an appropriate deliverable
  - Use additional pages if needed.
  - Must be signed by both you and the Client



# ASSIGNMENT 1

- **Important notes on clients:**

- Outside clients are welcome, so long as there is no real or perceived conflict of interest
- Family members, friends of family members, supervisors / bosses of family members, significant others, people over whom you have power, or anyone with whom there may be a conflict of interest cannot be clients.
- Other students, including graduate students, cannot serve as clients.
- Clients must be professors, staff members (if within Rowan or an academic institution), and/or people with sufficient technical background and authority to oversee the proposed work (particularly if outside of Rowan).
- Pet projects, hobbies, your own personal projects cannot be valid projects.



# ROAD MAP: NEXT WEEK IN P&C

## PRELIMINARIES FOR BECOMING A CONSULTANT

- Identifying your skills (review)
- Identifying your clients
- Identifying your revenue model
- Determining your fee
- Marketing yourself, and getting your name out there
- Having a contract
- Communication skills