



Quantum Leap Voyages

FUTURE MOBILITY TRAVEL LOG



Mentors Ritu and Jason

STUDENT NAME	EMAIL ADDRESS	START DATE: END DATE:
<p>“The mission of this exploration is to make the student aware of the PATHWAYS to career success!” Your responses to each adventure should be three or more sentences!</p>		
PATHWAY 1 HIGH SCHOOL STEP #1 CLASSES AND CLUBS - RITU	Ritu and Jason are interested in the modernization of transportation. Their high school classes include Math, Science, Technology and Mechanics. Possible CTE classes are Engineering Technologies, Transportation-Distribution-Logistics, Automotive Technology, and Aviation Operations. Ritu is interested in Aviation.	
<p>What classes can you take at your school to help you explore Future Mobility? List 2 or 3 choices.</p> <p>Does your school have an aviation club?</p> <p>Visit the National Association of H.S. Aviation Clubs to find out how to establish one. In brief, what key steps are needed?</p>		
STEP #2 CLASSES AND CLUBS - JASON	Jason is interested in automotive. He’s considering taking Automotive Engineering. He also will take CTE classes in Automotive Skills and Auto Technology.	
<p>Watch the automotive engineering video and note relevant details.</p> <p>What important concepts did you learn from the video?</p> <p>Read the Auto Engineering article. What other classes will compliment learning automotive engineering?</p>		
STEP #3 – AVIATION COMPETITION - RITU	Ritu was invited to be part of the GAMA Aviation Design Challenge. Watch video . Go to GAMA site . Review the details. Write an overview of important points and summarize your feedback.	
STEP #4 – AUTOTECH COMPETITION - JASON	Jason’s auto-tech teacher recommended Jason for the next Automotive Technology Competition. Watch video and summarize your findings. Visit National Automotive Technology Competition site to learn more.	
<p>Video summary:</p> <p>What are the 3-key responsibilities of the Dealer Association?</p>		



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PATHWAY 2 HIGH SCHOOL SUMMER ADVENTURES STEP #5 - JOB FOR JASON	Jason and Ritu are looking at summer activities related to Future Mobility. Jason seeks a summer internship at a local car dealership. He looks at Indeed.com, LinkedIn, and fills out applications at dealerships.
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Look at [Indeed.com](https://www.indeed.com) under automotive for summer jobs for high school students. What job titles are you interested in? Include 2-3 options.

Note 2 or 3 job specific skills or requirements you may need on your [resume](#). (see sample)

STEP #6 – JOB SHADOWING PROGRAM AND WORKFORCE DEVELOPMENT - RITU	Ritu found a summer opportunity at the Cradle of Aviation’s Job Shadowing Program and will be working alongside an aviation professional from Jet Blue. Watch the Full STEM Ahead video . What part of the journey did you like and why?
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Video summary:

Visit the [Cradle of Aviation Workforce Development](#). Watch Career Expo videos. What company and/or position did you find of interest and why?

STEP #7 – MEET UP WITH AUTO AI COMMUNITY - JASON	Jason joins a virtual meet up focused on automotive artificial intelligence. He makes connections and broadens his real-world learning. Watch the AI & Automotive Industry video.
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What are 3 ways Artificial Intelligence is shaping Future Mobility?

Review the [Auto AI Community Meet UP](#) site. Read the [AI article](#). What are 5 ways AI is impacting the automotive industry?

STEP #8 – H.S. SUMMER INTERNSHIP - RITU	The previous year, Ritu applied for an internship at NASA through Pathways to Science. She was excited to hear she was accepted for this summer’s internship.
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Go to Pathways to Science to look for programs. Share one program of interest and why.

Go to the Resource Toolbox. List 3 key tips.

Visit the NASA Intern Page to learn more. What are the 5 things to know about their internships?



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PATHWAY 3 OFF TO COLLEGE STEP #9 – 4-YEAR DEGREE OPTION – STAYING LOCAL	Making choices for after high school graduation. Ritu chooses a local 4-year Aviation program at Farmingdale State College. Review the Bachelor of Science Aviation Administration degree. Ritu’s focus is Airport Management and Finance.
<p>Review the program’s Educational Goals. What 5 course requirements do you find interesting and why?</p> <p>What concentration would you choose and why?</p>	
STEP #10 – COLLEGE CLUBS, GROUPS, MEMBERSHIPS – RITU	Once settled at college, Ritu joined a few clubs and associations to help with networking and expanding her opportunity reach. She particularly liked the AIAA Aerospace Industry Group, which offered various industry learning opportunities.
<p>Watch the AIAA Student Membership video. Do you believe Ritu will benefit from this organization and why?</p> <p>Visit AIAA Events page. What past or future event would you recommend for Ritu and why?</p> <p>Check out the Design, Build, Fly Competition. Is this something you find of interest and why?</p>	
STEP #11 – 4-YEAR DEGREE AT AN OUT OF STATE UNIVERSITY OPTION – JASON	Jason decided on a Bachelor of Science in Mechanical Engineering at Bucknell University. He reviews his schedule with his roommate -- Calculus, Exploring Engineering, Classical/Modern Physics and Writing are required 1 st semester.
<p>Review the Mechanical Engineering Overview and Courses. What one MECH course interests you the most and why?</p> <p>Explain why you think Jason is on the right path to achieve his vision?</p> <p>Review other Engineering Areas of Study. What are one or two other directions you might consider. Briefly explain why.</p>	
STEP #12 – COLLEGE CLUBS, SOCIETIES AND MORE – JASON	Fully emersed in mechanical engineering studies, Jason seeks peer and social groups. He joins the American Society of Mechanical Engineers virtual networking event. The speaker spoke of a Master’s in Automotive Systems Engineers at the University of Michigan, which is now Jason’s goal after graduation.
<p>Watch the Rise of Collaborative Robots in Manufacturing video. What are 2 or 3 advantages to human/robotic teamwork?</p> <p>Explore ASME site. Why do you think this society is a good resource for Jason?</p> <p>Visit the University of Michigan site to learn more about their master’s in automotive systems engineering. What are two important program details?</p>	



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PATHWAY 4 COLLEGE SUMMER ACTIVITIES - JASON STEP #13 – INTERNSHIPS	Jason’s connections at ASME lands him an opportunity to intern at Ford’s Virtual Summer Internship Program. Jason is considering a career at Ford after graduation, so he is excited for the experience.
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Watch the [Ford Virtual Summer Internship](#) Video. Is this an internship you might consider? What feedback did you hear that was persuasive?

Explain why you think this company might be a good opportunity for Jason.

Visit [Ford's career page](#) to see future mobility opportunities. Find a position you think is a good fit for Jason. Explain why.

STEP #14 – VOLUNTEERING AND MENTORING – JASON	As a kid, Jason was mentored by his father’s mechanic. It’s was sparked his passion for cars and mechanical engineering. This summer he wanted to pay-it-forward. He looked into Volunteer Match and will be mentoring students in STEM.
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Watch the “[What Inspires You](#)” video. Note your feedback.

Explore site for [The Shoulders of Giants](#). Are you interested in mentoring or being mentored? What is your STEM focus?

Check out the [Volunteer Match](#) site. What kind of volunteering are you interested in and why?

STEP #15 – JOB SEARCH AND WORK-BASED LEARNING – RITU	After her first year at college, Ritu seeks a work-based learning opportunity over the summer. Her goal is to work in an environment where she can gain real-world experience in the career path of Aviation
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Explore [Chegg Internships](#), focusing your search on aerospace or aviation summer jobs. Describe one job you liked and explain why.

Read the [FlexJobs](#) article: 9 Video Interview Tips to Help You Succeed. In brief, list the 9 video interview tips.

STEP #16 – INDEPENDENT LEARNING – RITU	Ritu’s passion for flying began when her family travelled to New York from her childhood home in India. Her studies are on Aviation Administration, but her personal goal is to learn how to fly. She decides to take a 1-hour private lesson at the airport by her school.
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Check out the details for her lesson at [Cloud 9 Living](#). Do you think this experience will help Ritu in her career in Aviation Administration? Why?

Read the article, “[How to become a private pilot?](#)” What are the 8 steps to get a license?



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**PATHWAY 5
LIFELONG LEARNING**

**STEP #17 - LEARNING
@ THE JOB SITE**

Choose any 2 companies listed. Explore their websites. Answer the following:

1. What is the corporation's vision? Goals? Mission?
2. What services or products does the company provide?
3. Using the organization's website career page – list the current job openings/internships which relate to your career goal.
4. Find the organization's [LinkedIn](#) site. What else can you learn about the company and its vision/goals?

Companies: [#1](#) [#2](#) [#3](#) [#4](#) [#5](#) [#6](#) [#7](#) [#8](#) [#9](#)

STEP #18 - APPRENTICESHIPS

An apprenticeship is a paid period of training. Watch NYS [Apprenticeship Video](#). Review the following sites: [NYS Department of Labor](#), [Automotive Technician Apprenticeship](#), Apprenticeship - [Aviation Maintenance](#), [Transportation How to become a Mechanic Apprentice](#), [Aviation Safety Certification](#).

1. Watch Apprenticeship video and note anything helpful you learned.
2. Select two training opportunities you are interested in? Summarize your choices.

**STEP #19 - U.S. MILITARY
SERVICES OPTION**

Explore one of the military services below for a career related to Future Mobility. Watch video: [Sheppard Speaks Crew Chiefs](#). Journal your feedback. Describe the military training program you would consider joining to enhance your career.

[ARMY](#) – [NAVY](#) – [AIR FORCE](#) – [MARINES](#) – [U.S. COAST GUARD](#)



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Congratulations on completing the voyage of career pathways for Future Mobility! Please summarize your experiences in the reflections below.

STEP #20 – REFLECTION: IS THIS A CAREER PATHWAY FOR YOU? Watch video: [Elon Musk Life Advice...](#)

1. Have you taken some of the high school courses you need to take to get yourself started on the pathway?
2. Which summer activity are you eager to take in order to validate your interest in this career field?
3. What “Life-long” learning options pathway will you take upon leaving high school? You can choose among full time employment, apprenticeships, armed services and post-secondary education, which are all sound choices.
4. If applicable, what college major and courses would you choose to study at a two-year or four-year college?
5. What summer activities are you eager to explore to increase your success chances of entering the field of employment after completion of high school or college?
6. When ready what full-time employment opportunities will you choose?
7. Which apprenticeship program(s) would you join for on-the-job training leading to full-time employment?
8. What military service would you consider for “FREE” education and training in the field you would like to pursue?
9. Did you enjoy this career pathway adventure and why?
10. Would you like to try another career pathway voyage?