Nathan Maldonado - Post-Secondary Plans

Post Secondary Plan

- 1. What is your desired career topic?
 - a. My desired career topic and one that I hope to pursue after completing my education is a Computer and Information Research Scientist.
- 2. Provide a brief overview of the job description:
 - a. Computer and information research scientists, in brief, are responsible for creating and designing innovative solutions and utilizations of computer technology. More specifically, however, these computer and information research scientists present their research at conferences regarding innovating programming languages and technology.
- 3. Personal Qualifications/Qualities (things you need to know and things you need to know how to do)
 - a. Some personal qualifications that a computer and information research scientist needs include analytical, mathematical, and problem-solving skills. However, these computer and information research scientists are also expected to have interpersonal and communication skills in order to present information and communicate with peers.
- 4. What are the education requirements/work experience needed (Major, AA, BA, BS, Masters, Doctorate, Certifications(s)
 - a. The education requirements needed to become a computer and information research scientist include a master's degree for hire at private companies, yet the federal government may hire those with only a bachelor's degree.
- 5. What exams must be passed in order to work in this field? (if applicable)
 - a. No exams must be passed in order to begin work as a computer and information research scientist.
- 6. What type of license must a person hold to work in this field (if applicable)
 - a. No specific license must be obtained to hold work as a computer and information research scientist.
- 7. Describe the typical work environment for this occupation?
 - a. The typical work environment for this occupation asks computer and information research scientists to work full time, typically either for the federal government or in private research.
- 8. What is the median salary for this profession? Include your source.
 - a. The median salary, according to the <u>Bureau of Labor Statistics</u>, is \$126,830 per year.
- 9. What is the job outlook for this profession? (include your source)
 - a. According to the <u>Bureau of Labor Statistics</u>, the job outlook for this profession is growing faster than the growth rate for all other occupations by approximately 14%.
- 10. What are your potential likes and dislikes about the career?

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a. My potential likes about this career include the opportunity to research computational linguistics as well as innovative technology regarding artificial intelligence and robotics. However, I am discouraged partly by the required time needed in education that could have otherwise been spent in the workforce.

Two-Year Plan

Where do you see yourself in two years? (What will you be doing? Where will you be living?) In two years, I hope to still be in North Carolina, studying at Duke to complete my education in Computer Science and Linguistics. By my second year in college, I hope to have already had at least one internship related to computer or data science that I could put on my resume and could use to get me in the door at various technology companies. In my personal life, I hope to be making larger plans to spend the rest of my life with my current girlfriend as we have been in a committed relationship for four years already.

Five-Year Plan

- 1. Where do you see yourself in five years? (What will you be doing? Where will you be living?) In five years, I hope to be beginning my doctorate degree in computer science or a related field. A doctorate would make me more competitive for work as a computer and information research scientist. However, I do not yet know which graduate program I would like to attend. Private institutions offer a better stipend, making Brown University and Vanderbilt University my top choices. However, if I decide to move back to Los Angeles after graduating from Duke University for my undergraduate degree, I hope to attend either the University of California, Los Angeles or the University of Southern California.
- 2. List the steps you will take to take to reach your five-year plan:
 - a. Become the research assistant for a STEM professor or graduate student.
 - b. Continue involvement in meaningful extracurricular activities, including holding course rigor inside and outside of specialization or focus.
 - c. Hold at least two internships during the entirety of my undergraduate experience.
 - d. Begin to network and make connections with my fellow classmates to continue relationships, both professional and personal.

Year 1: Post High School

List two goals for the summer after high school:

- 1. I would like to receive my driver's license the summer after high school so that I do not have to rely on public transportation if I do not need to.
- 2. I hope to continue tutoring students through their coursework to earn money that I could later spend at university.

List two goals for the fall after high school:

1. I hope to find a solid group of diverse friends that I will continue with throughout the entirety of my college experience.

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2. I hope to open my mind and try new things that I previously have not done while in college.

What course will you be taking in the fall/training you will be receiving? (If unsure, list desired courses/training to take)

In the fall, I will be participating in a FOCUS cluster and will be taking Introduction to C++, K'iche' 1, Bilingual Linguistics, and Discrete Math for Computer Science.

How will you be earning an income? How will you be paying for college? I will be earning income as a tutor through an online service that allows me to teach to students around the world. With this service, I hope to teach Spanish speakers as foriegn language tutors are paid significantly more. I will also be completing a federal work study program and hope to work as a research scientist as this will give me the opportunity to pay for part of my tution and can act as a crucial aspect to my resume. However, I will be paying for college through grants and scholarships in addition to the aforementioned work. I have received a grant of approximately \$70,000, and I have received additional scholarships that makes the final cost of attendance approximately \$5,000, which I intend to pay with my tutoring. Every summer, however, I will have to analyze whether or not I can or cannot complete an unpaid technology internship or should work for one of my uncle's in construction or welding instead to pay for my tuition.

List two goals you would like to achieve by the end of your first year after high school?

- 1. By the end of my first year after high school, I hope to make at least two friends that will stay with me for the rest of my life.
- 2. I hope to have flunch (faculty lunch program at Duke where students have a formal meal with a professor or faculty member of their choice to begin networking) with one of my professors that could potentially be a mentor of mine.