Profiles of Computer Scientists

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<th>Education</th>
<th>B.S. Computer Science, Alabama A&amp;M University</th>
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<tr>
<td>Job Description</td>
<td>Senior Software Quality Engineer responsible for the review and approval of software designs for air combat training systems, complex avionics, radars, homeland security systems, vertical launch systems, and various integrated systems for military applications.</td>
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<td>Advice to Students</td>
<td>&quot;Stay focused on your goals but also keep a good balance in life - dig your feet right in and get grounded to accomplish what you need to be doing, but also make time for family, friends and have fun. And never forget to take the time to dream and think outside the box -- that's usually where big ideas and new technologies are realized.&quot;</td>
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**Interview Segments**

| Q: When did you know you wanted to become an Engineer? |
| January: Over thirty years ago, I was fascinated about computers after seeing a commercial on television about them. It was after this, I started to dream about becoming an engineer at twelve years old. |

| Q: What was your college experience like? |
| January: College life was a structured and disciplined learning environment, especially living on campus. Classes and course work took up a lot of time, but I learned to prioritize and stay focused to get things done - and still have time for fun. |

| Q: Did you incorporate work experiences while you were an undergrad? |
| January: I worked in the Computer Science Department on campus as a student assistant. This not only helped pay for college but it also provided me with a great learning experience in working with the systems as well as working with the students. |

| Q: How did you get your first job? |
| January: I sent out resumes during my last year of college and landed a job with Harris Corporation in Syosset, New York. Since I grew up in a small Alabama town in a close-knit environment, the hardest thing I ever had to do was to get on a plane and move to New York. However, if I really wanted to start a career, I knew that I had to take a leap of faith. Twenty three years later, I look back at my decision and can say that it was one of the best decisions that I have ever made. |
Q: What's the most rewarding thing about being an Engineer?
January: The best thing about being an engineer for DRS Technologies is the work that I do really matters and helps other people. Our most important customer is the United States Military. In order for them to keep us safe, they need to have the best training and equipment available.

Q: Is there an example you can provide that shows how something you've worked on has positively impacted the world?
January: I work on Air Combat Training Systems at DRS Technologies, primarily the P5 Combat Training System (P5 CTS) Program. Our team supports fighter aircrews in the US and overseas with airborne instrumentation systems that offer training accuracy. This is to ensure the performance of aircrews during a live mission is improved. I also work on various other Airborne Instrumentation Pod Systems that allow pilots to simulate military combat missions using Air Combat Maneuvering Instrumentation (ACMI) Training. Information is recorded during the combat training simulation and the pilots review and learn from it when they've completed their training mission. This increases the pilots' effectiveness during live combat. These systems include a complete ground infrastructure system (display and debriefing stations, ground stations, training, documentation and logistics support). This combination of test and training instrumentation offers range performance accuracy to training range users providing more effective tracking, credible weapon simulations, and overall realism for fighter aircrews in the US and internationally.

Q: Do you spend a fair amount of time traveling?
January: I do not travel much but I do provide support to field engineers who work in the field and report status on how the systems are performing, whether or not the system is working correctly, and if there are problems occurring with the systems that require resolution such as a software change or improvement.

Q: Do you have a mentor? Or did you in your college years?
January: Although I do not have a mentor and did not have the opportunity for mentorship while I was in college many years ago, I do recognize the value of having a mentor as this person will be able to guide and encourage a person to reach their goals, as well as offer advice. Luckily for me when I was in college I was so focused on what my career path would be, because of my dream to work on computers since I was twelve years old. I had a sure destination already on course.

Q: Do you find yourself working more in a team situation, or more alone?
January: For the most part, I work in a team environment performing life cycle support of the entire system. The team consists of systems engineers, software engineers, configuration management specialists, test engineers, and manufacturing engineers and testers to design, develop, integrate and test systems from beginning (design) to end (production and deployment) to ensure delivery of systems that perform as required.

Q: Do you find you are able to balance work with social/family life while working in your current job?
January: My family and I work together to coordinate our activities and schedules as we all have busy schedules. Working together, we are able to make sure that work, family life and extracurricular activities are accomplished, and still have time even for a family hobby. Overall, I think that we manage to keep good work-life balance.

Q: If you had to do it all over again, would you still become an Engineer?
January: To work on computers has been my dream since childhood. Yes, if I had to do it all over again, I would still follow my dream to work on computers.

Q: Did you think that school prepared you for the way the work gets done in the real world?
January: Yes, I think school gave me the basic building blocks that I needed to expand my knowledge base upon and taught me to be disciplined in accomplishing tasks. Following the curriculum and recognizing that it was important to schedule and prioritize studies, established a pattern for me to follow that has proven beneficial throughout my career.

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Q: Where do you see jobs for Engineers in the future? What should students be doing to prepare themselves to take on those roles?

January: There are many facets of Engineering that have not even been tapped into yet -- expanding research in Artificial Intelligence, Green Technologies, Space Technology, Power and Energy, and the list goes on. What students should be doing is thinking. They should be dreaming of what they want to do and what they want to accomplish. Students should work with career guidance counselors at their schools to channel their studies in areas that they are really interested in. This way, they can benefit the most from their education, while preparing for their future career. They should stay involved or become involved with the IEEE and/or organizations like the IEEE that will provide a great informational resource and support network in the Engineering fields.

Q: What other advice do you have for students?

January: Stay focused on your goals but also keep a good balance in life - dig your feet right in and get grounded to accomplish what you need to be doing, but also make time for family, friends and have fun. And never forget to take the time to dream and think outside the box -- that's usually where big ideas and new technologies are realized.