

READY

FOR

TAKE-OFF

THE AEROSPACE & DEFENSE INDUSTRY IS POISED FOR GROWTH IN 2016

According to a recent report by Deloitte, 2016 will be a great year for the aerospace and defense sector.

"Travel demand, new technologies, and security threats are fueling increases in aircraft production, defense budgets, and the global supply chain," notes the report titled "2016 Global Aerospace and Defense Sector Outlook."

With revenues estimated to grow, look for great opportunities to fuel your career aspirations in this space.

Here, four engineers share career advice and ways to find success in this rebounding field.



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SOLVING COMPLEX PROBLEMS AT THE MITRE CORPORATION

r. Gina Guillaume-Joseph wants to ensure that all systems are a-go.

Guillaume-Joseph is the lead systems engineer and executive advisor for senior federal government sponsors at The MITRE Corporation, which operates federally funded research and development centers (FFRDCs).

"We are a non-biased organization that provides strategic guidance, support, budget prep, analysis, and workforce, regulation, and policy development to help our government solve their most complex problems," says Guillaume-Joseph.

Founded 70 years ago to assist with the country's defense needs, The MITRE Corporation now operates seven federally funded research and development centers. Guillaume-Joseph has been with the company for five years.

Her career requires her to be agile, something that Guillaume-Joseph learned firsthand in college. While she has an undergraduate degree in computer science, a master's degree in information systems, and a PhD in systems engineering, IT and computers weren't her first choice when she went to college; instead, she envisioned getting a degree in pharmacy.

"As I talked to people at college, including advisors,

BY AMANDA N. WEGNER



Dr. Gina Guillaume-Joseph, Lead Systems Engineer And Executive Advisor For Senior Federal Government Sponsors, The MITRE Corporation

they suggested I try computers and that maybe it would be something I enjoy," recalls Guillaume-Joseph. "I fell in love with the profession. You can start off thinking you know what you want to do at 18, but it doesn't always work out and that's okay."

What Guillaume-Joseph likes about systems engineering is that she gets to look at the whole picture from start to finish. It also calls to her more social side.

"I enjoy the interaction with others, and being able to brainstorm and solve the most complex problems of my government counterparts," says Guillaume-Joseph. "I'm an extrovert and being a systems engineer gives me that outlet."

One key to this is the ability to actively listen, which Guillaume-Joseph says is an important trait for systems engineers.

"Systems engineering is about understanding and listening to the causes, and many times, this is important information that might not be spoken or presented outright to you."

Of course, systems engineering also comes with challenges, and a significant one is that often, "there is no one solution to the problem and not one way to get to a solution," says Guillaume-Joseph.

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In fact, because "technology moves at the speed of light, as young professionals, you need to always be learning new things and looking at other ways to improve your knowledge."

One way is to get involved with professional organizations. Guillaume-Joseph serves as president of the Washington Metro Area chapter of the International

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Council on Systems Engineering (INCOSE); her participation in INCOSE, she says, has been critical to her systems engineering journey.

"Being part of a professional organization allows you to get involved, talk to folks who are already there, find mentors, and see where this can take you after getting your degree," she comments.

Particularly for female engineers, she notes, "surrounding yourself with those who have that knowledge, male or female, minority or not, folks who are where you want to be, practicing the career path you want to go toward," is important. They are your advocates, she says, people who will give you unbiased advice, even if it's advice you may not want to hear but that will help you position yourself for success.



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