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Episode 6

DATAWorks 2022: Day 1 Attendee Reactions



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DATAWorks 2022: Day 1 Attendee Reactions

IDA Ideas host Rhett Moeller spoke to Nicole L. DeGregorio and Allison L. Goodman, researchers in the IDA Systems and Analyses Center, about their experiences as attendees on the first day of the Defense and Aerospace Test and Analysis Workshop (DATAWorks) 2022, held at IDA in Alexandria, Virginia, on April 26-28.

[Begin transcript]

Rhett Moeller: Hello listeners, I'm Rhett Moeller and I'm the host of *IDA Ideas* and we want to welcome you to this special podcast short as we talk about a big event here at IDA. This year we're hosting the DATAWorks workshop and DATAWorks is short the Defense and Aerospace Test and Analysis Workshop, and it is the result of a multi-organization collaboration with other organizations including the Director of Operational Test and Evaluation, or DOT&E, the National Aeronautics and Space Administration, NASA, and the American Statistical Association or ASA. This is the seventh annual DATAWorks and we're happy to see it happen in our own backyard and so we are going to talk a bit about this informally with some researchers throughout the week as the events unfold. And I'm happy to be joined today by a couple of researchers from our Operational Evaluation Division [or OED]. Nicole and Alli are here with me in the recording studio, and Nicole if you could take a moment to introduce yourself.

Nicole DeGregorio: Yeah. Hi, my name is Nicole DeGregorio. I'm a new hire at OED and IDA. I just started in December. I did my Ph.D. in computational chemistry from Indiana University. Before that, I did a bachelor's degree in biological chemistry from UC Merced.

Rhett Moeller: Great. Welcome Nicole. Alli?

Allison Goodman: Hi, my name is Alli Goodman. My background is in biomedical engineering with my degree from Virginia Tech and my undergrad is in mechanical engineering.

Rhett Moeller: Great. Welcome Alli.

Allison Goodman: Thank you.

Rhett Moeller: So, each day of DATAWorks is made up of several different components, things that happen throughout the course, and so I wanted to ask you if you could describe what short course you took today. What did you attend and what was it about that that drew you to it? Nicole, let's start with you.

Nicole DeGregorio: Yeah so, I went to the R-Markdown and Tidyverse short course today and what drew me to that one is, as being a new hire at OED, you know, it's a lot of information all at

once and, you know, I'd never really used R before I joined IDA. So I wanted to see what was the capabilities of it and see how it could be utilized to do the analysis that is done in OED.

Rhett Moeller: Alli?

Allison Goodman: I took the Operational Cyber-Resilience and Engineering and Systems Test short course today. It was interesting in that it provided a framework for looking at different items and a different perspective of how you can design for resilience.

Rhett Moeller: Great. You've talked a bit about what the short courses were about. What is it that really drew you to it? Is it building on something you already know?

Nicole DeGregorio: For me, taking the short course allows me to do better reproducible research, which then will hopefully allow me to do better analysis.

Rhett Moeller: So, after getting your first day's taste, did any particular moment stand out to you today? Anything that was said in one of your presentations that made you just go "Ah ha!"

Nicole DeGregorio: Yeah, so for me the first half of the course was about R Markdown, which I had never seen before, didn't really even know it existed, and what was interesting about that was it makes it extremely easy to collaborate because it makes it easy to read your code and see how you're generating your figures and your analysis in such a way that if you were just to pass it off to someone else, they can pick it up and see, OK, this was their thought process behind that, which I think that's, in general, extremely hard to do. Just because usually, you know, you write the code and six months down the line you might not even understand what's happening. So, and to see that and to see how that could enable collaboration was extremely interesting and, you know, makes me think that maybe R Markdown might be the way to go in the future.

Rhett Moeller: Great. Is there anything that you're really looking forward to beyond today? Is there anything that you're really looking to sit in on and really pick up on? Nicole let's start with you.

Nicole DeGregorio: I'm actually interested in the Applications of Deep Learning and Monte Carlo Analysis session. Specifically, with defense, I've kind of seen that in the past how it relates to chemistry and things you can do with computational chemistry, but I don't see how that applies to defense quite yet, so I'm interested in seeing that and learning how maybe things I've seen in the past relate to the current analysis I'm doing.

Rhett Moeller: Great. Hooked you with the title.

Nicole DeGregorio: Hooked me with the title, yeah.

Rhett Moeller: Alli you have anything?

Allison Goodman: Yeah, I'm interested in attending some of the courses on statistical methods. I feel like that's always an area that I can improve upon and have a better understanding of.

Rhett Moeller: Well Nicole, Alli, thank you very much for taking some time away from your busy day, at the end of the day, to share your thoughts about what happened, and I'm glad you had some meaningful moments from the DATAWorks first day in 2022. For more information, listeners, feel free to drop into our show notes and follow the link to the DATAWorks site. You'll find plenty of information about the rest of the week. Thank you for joining us, listeners, and we hope you'll join us again tomorrow for another podcast short as we interview two more researchers about their day's experiences at DATAWorks.

Show Notes

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