

Episode 10

# **DATAWorks 2023: Day 1 Attendee Reactions**



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# **DATAWorks 2023: Day 1 Attendee Reactions**

IDA Ideas host Rhett Moeller spoke to Addison Adams and Olivia Gozdz, 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) 2023, held at IDA in Alexandria, Virginia, on April 25-27.

# [Begin transcript]

Rhett Moeller: Hello, listeners. I am Rhett Moeller. I am the host of IDA Ideas, and welcome to this special podcast short as we talk about a big event here at IDA. It's that time of year once again, IDA's headquarters is hosting the 2023 DATAWorks workshop. DATAWorks, or the defense and aerospace test and analysis workshop, is the result of a multi-organization collaboration with other organizations including the Director of Operational Test and Evaluation, DOT&E, the National Aeronautics and Space Administration (NASA) and the American Statistical Association (ASA). It's hard for me to believe it's been a year already, but here we are. This is the eighth annual DATAWorks, and IDA has the honor of hosting this big event once more. Today's conference began at 9 a.m., and just wrapped at four, so we're taking a moment to talk with a couple of different researchers about their experiences, and we'll do this again over the next couple of days. I am happy to be joined today by a couple of researchers from IDA's Operational Evaluation Division, or OED, and joining me today in the studio is Addison Adams and Olivia Gozdz. Welcome to the podcast. Can you take a moment to introduce yourselves and provide a bit of educational and professional background? Addison, let's start with you.

**Addison Adams**: Yes, thank you. As you mentioned, my name is Addison. I've been working with IDA since the summer. I started as a summer associate in the OED or Operational Evaluation Division. It was a wonderful experience, and I was excited when they asked me to come back, for this DATAWorks. I'm currently doing a Ph.D. in statistics at Colorado State University in Fort Collins and was excited to be here.

Rhett Moeller: Great, welcome. Olivia?

**Olivia Gozdz**: Yeah, thanks for having me on the podcast. My name is Olivia Gozdz. I work in OED's sustainment group. I've been at IDA since September of 2022, so I'm a relatively new hire. My educational background includes a bachelor's from Hamilton College, where I studied physics and philosophy, and I received my Ph.D. from George Mason University in May of 2022, and I received my Ph.D. in climate dynamics.

**Rhett Moeller**: Great, well welcome, and thank you both for joining us after a very busy day. Each day of DATAWorks consists of a selection of presentations on different topics of interest to

members and organizations in our professional community. There's really a topic for everyone, as I looked over the list I saw a wide range of different kinds of things. Can you tell us about notable presentations you attended today? What did you attend, and what really drew you to it?

Addison Adams: Yeah. So, I attended the Bayesian course. As I mentioned, I'm a student studying statistics, and so I've studied about Bayesian philosophy before, and I was interested in it. What really drew me today was previously, when I've been working in Bayesian field, I typically have coded it all from scratch, and maybe part of that is just because I want to understand it at a deeper level. But I saw that in this, or in the course today that they were going to be teaching us how to use bugs and jags and some of these more commonly used statistics software for Bayesian analysis. And so, I thought, well, this would be good for me at this point to start learning how people typically code it because most people don't code it from scratch. And so that was interesting, and it was a good learning experience for me.

Rhett Moeller: Great. How about you, Olivia?

**Olivia Gozdz**: Yeah. So, I attended the Present Your Science short course today, and the reason why I wanted to attend was because communication is such a vital aspect of what we do at IDA. We're constantly communicating with sponsors trying to get our technical, scientific ideas across to them and being able to do that effectively is really key in our success as an organization.

Rhett Moeller: Great, and so you found that short course to be helpful in that.

**Olivia Gozdz**: Yeah, it was extremely helpful. It was taught by Melissa Marshall, who is a Ted Talk speaker. So, it was very entertaining as well. She definitely captivated the audience, and we got a lot of great tips on how to effectively communicate our science.

Rhett Moeller: Excellent.

Olivia Gozdz: Yeah.

**Rhett Moeller**: As I said, in looking at the agenda for today, it looked like there were so many different offerings covering a diverse array of topics. Looks like there's something for every attendee to gain something out of the experience. Were there any revelations? Was there anything that the presenter said that caused you to look at your work or your understanding of the topic differently?

Olivia Gozdz: Well, one of the things that really stuck out to me, which it seems really obvious when you just hear it out loud, but something about it just really resonated with me, is that when we craft presentations, scientifically, a lot of the presentations that we view and possibly have made, myself included, are very speaker-focused presentations, and there really needs to be a focus on the presentation being audience-based, and if you think about what makes a presentation a great presentation; all of the metrics that would encapsulate a good presentation include the audience. So that was just something that it makes a lot of sense when you hear it, but it's oftentimes forgotten, and that's something that's definitely going to be sticking with me as I continue to make my presentations in the future. Another thing that stuck out to me was Melissa advocated a lot for

the death of bullet points, which I am guilty of using on more than one occasion, having presentations that are more picture-based is something that she advocated for it's easier said than done. But yeah, something that definitely stuck with me.

Rhett Moeller: Yeah, great.

Olivia Gozdz: Yeah

Rhett Moeller: Addison, did anything stand out in the Bayesian course?

Addison Adams: Well, so when you start any Bayesian discussion, it seems like there's always this, not conflict, but somewhat of a debate. Most people are familiar with the frequentist method, and so I always enjoy that piece, and of course that was there. So, you had people that had never heard about Bayesian before that we're sort of yeah questioning, well, why would you do this? And what about your priors? Which is like a key component in Bayesian analysis, and then you had people that have been there, you know, done Bayesian work their whole lives, or whatever. And so, they were able to answer, and so it's just, I think, between that discussion of some newer and more experienced people, it was really good to hear that discussion, and I always like it because it kind of approaches a philosophical debate, which interests me. And so, that was enjoyable to hear.

**Rhett Moeller**: Yeah, I think there's a lot of good in hearing somebody who's new to a field asking questions because it makes you consider: how would I present that? How would I share something that I know well with somebody who doesn't know it well and help them understand it? So, good, I'm glad you got that out of this.

**Addison Adams**: Exactly, and I think when anybody ever asks a question too, inevitably, anybody that has any experience in it, in our minds are thinking, oh, this is how I would answer it, this is what I would say, and then you have the chance to hear somebody else that's an expert in that area answer how they answer, and then you think, oh, you know, that's, I hadn't thought about it in that context or from that perspective, so.

Rhett Moeller. Great, yeah, all about awareness.

Addison Adams: Yeah

**Rhett Moeller**: Day one is over, but there are still two days full of content to come, so I want to ask you both: is there anything in particular that you're looking forward to over the next two days? Addison?

**Addison Adams**. Yeah. So, I have the opportunity to present on the work that I did here at IDA over the summer. I will present on that tomorrow in one of the speed presentations. I'll be presenting on design of experiments for generalized linear model. In particular, when you have a binary response, and I'm excited for it because, you know, you've been putting all this work into it, and you're excited to give it. I only have eight minutes in order to present it, so maybe I should have gone to the, you know, Present Your Science one today. But yeah, I'm excited for that, and

then I'll have a chance with the poster to sort of answer questions and talk more about it. And then also just hear what other students are doing in the speed presentations. I'm excited to go and attend those and listen.

**Rhett Moeller**: Great, sounds like a very collegial environment. That's wonderful. How about you Olivia?

Olivia Gozdz: Well, first I'll say that Addison, attending the Present Your Science short course might have you second guessing your speed talk because I am giving a talk tomorrow, and I'm definitely wishing that I perhaps made my slides a little bit differently. I'm going to be doing a lot of practicing tonight. So, tomorrow I'll be giving a talk on time machine validation for sustainment models. It's an application of cross validation that our team has conducted. So, I'm looking forward to that despite the fact that I wish I could make some changes to my presentation right about now. So yeah, tune in tomorrow.

**Rhett Moeller**: Addison, Olivia, thank you very much for taking some time away from your busy day today.

Olivia Gozdz: Yeah, thank you for having me on the podcast.

Addison Adams: Yeah, it's been a pleasure. Thank you.

**Rhett Moeller**: There's much to gain from this event and it's great to know that we have two more days still to come. Here's to an enriching week for you, and for all of our attendees, as DATAWorks 2023 continues. 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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