# Audio file <u>Full Access Podcast - Episode 3 - First Cut8tk99.mp3</u>

## Transcript

00:00:00 Debbie Garner

Hi everyone, welcome to full access. Hosted by Gray shift. This is podcast episode #3 and my name is Debbie Garner and I'm enjoying my life after law enforcement career as the solutions evangelist for Gray Shift and I'm one of the hosts of full access. I'm joined by my co-host, Wilton Cleveland who is a.

00:00:21 Debbie Garner

Salesperson with Gray shift.

00:00:22 Debbie Garner

And today we are excited to be talking with Jessica Hyde.

00:00:26 Debbie Garner

Jessica is the founder at Hec Sordia, as she's been a magnet forensics consultant and she is an adjunct professor at George Mason University.

00:00:36 Debbie Garner

She's heavily involved in the DFIR community and that is some of what we're.

00:00:40 Debbie Garner

Going to discuss today.

00:00:43 Wilton Cleveland

Yeah, I'm just glad to be here and I'm really excited to talk to Jessica today.

00:00:46 Wilton Cleveland

If we're gonna learn quite a bit.

00:00:48 Wilton Cleveland

I'm talking to her.

00:00:49 Wilton Cleveland

She's got a pretty extensive background in digital forensics, so I'm pretty excited to get started.

00:00:54 Debbie Garner

Absolutely all right?

00:00:56 Debbie Garner Well then, let's get started. 00:00:57 Debbie Garner So Jessica, I believe. 00:00:58 Debbie Garner We sort of met. 00:01:00 Debbie Garner On social media, you know having similar interests and goals. 00:01:05 Debbie Garner You have a very active and loyal Twitter following. 00:01:09 Debbie Garner I would even go so far as to say you have fans, I know. 00:01:13 Debbie Garner You don't feel that way. 00:01:14 Debbie Garner But you do, but for those listeners. 00:01:17 Debbie Garner Who don't know you? 00:01:19 Debbie Garner Tell us just a little bit about. 00:01:21 Debbie Garner Yourself the basics. 00:01:23 Jessica Hyde Sure, it's just so great. 00:01:24 Jessica Hyde To be here, so thank you. 00:01:25 Jessica Hyde So much Wilton. 00:01:26 Jessica Hyde

Debbie, for having me on and just such a pleasure to get to be here on.

00:01:32 Jessica Hyde

Full access with Gray shift and just.

00:01:35 Jessica Hyde

Great so yeah Debbie.

00:01:36 Jessica Hyde

You and I met on Twitter, you know, because I spend a lot of time specifically there.

00:01:43 Jessica Hyde

Under my profile bin to Hex P1N2H3X, which I know is a mouthful, but it's nerdy, right? It's a pattern alphanumeric, it's one thing.

00:01:50 Debbie Garner

It is, it is absolutely, you know.

00:01:53 Debbie Garner

We're all nerds here.

00:01:53 Jessica Hyde

Oh yeah, you're you're.

00:01:54 Debbie Garner

We own it.

00:01:56 Jessica Hyde

And your handle is equally nerdy.

00:01:58 Debbie Garner

Yes, absolutely.

00:02:01 Jessica Hyde

So I spend a lot of time on Twitter, just sharing either new things I've found about the DFIR, but a lot of times just really trying to help people in the community because I think.

### 00:02:16 Jessica Hyde

That it is really important that we have community, so I've been in digital forensics for Louis.

00:02:25 Jessica Hyde

10-15 years and and I came out of the ID analysis world actually after my time in the Marine core and started doing digital forensics that way.

00:02:37 Jessica Hyde

So I did a lot of time with DoD.

00:02:39 Jessica Hyde

The IC I did a stint doing IR and forensics in consulting for.

00:02:45 Jessica Hyde

I before going to magnet where as the director of forensics for five years and then just recently launched EXODIA.

00:02:52 Jessica Hyde

But a lot of what we've met about is just talking about the changes that are happening in digital forensics.

00:03:01 Jessica Hyde

The newest technology is the newest techniques.

00:03:04 Jessica Hyde

The difficulties and challenges, but then also the human side of digital forensics.

00:03:10 Jessica Hyde

How we we help people.

00:03:12 Jessica Hyde

How we help bring people into the field.

00:03:15 Jessica Hyde

How we help people who are dealing sometimes with the mental health issues that are associated with.

00:03:19 Jessica Hyde

Looking at traumatic content.

00:03:21 Jessica Hyde

Then how we how we deal with these modernization of labs?

00:03:22 Debbie Garner

Right?

00:03:26 Jessica Hyde

How we deal with the the challenges of more data, et cetera.

00:03:29 Jessica Hyde

And it's just such an amazing collaborative Twitter community.

00:03:35 Debbie Garner

lt is.

00:03:35 Jessica Hyde

Sometimes sometimes people think and it's just funny.

00:03:38 Jessica Hyde

'cause I know that's how we've met, and I notice how I've met a lot of people.

00:03:41 Jessica Hyde

But sometimes people think that Twitter is all about what you had.

00:03:44 Jessica Hyde

For breakfast and.

00:03:45 Debbie Garner

All right?

00:03:46 Jessica Hyde

And it's not in DFIR, it's actually how you know what's going on, what the newest tools, techniques, methods, problems, challenges are.

00:03:56 Jessica Hyde

The quick and like.

00:03:58 Jessica Hyde

How do you find?

00:03:58 Jessica Hyde

Out about SIS diagnose logs before anywhere else.

00:04:01 Jessica Hyde

By seeing a.

00:04:02 Jessica Hyde

Tweet from Matthew Epiphany and really cultivating lists and and seeing.

00:04:06 Jessica Hyde

Everything that you post Debbie that you that you're putting out there and sharing and have even since your time.

00:04:12 Jessica Hyde With GBI right like. 00:04:14 Jessica Hyde That's the kind of content and also for people who are looking for work right like #dfir jobs, important. 00:04:15 Right? 00:04:20 Jessica Hyde And so yeah, just just trying to. 00:04:26 Jessica Hyde Do the right things and sharing and being a part of the community that I care and I'm passionate about and I just feel privileged to be able to do so. 00:04:34 Jessica Hyde I had to put my career where I couldn't be public and so it's it's nice to be in a time in my. 00:04:39 Jessica Hyde Career where I can be? 00:04:41 Wilton Cleveland That's great, hey, so tell us about your path like into DFIR. 00:04:46 Wilton Cleveland I mean high school college. 00:04:48 Wilton Cleveland Were you looking that way? 00:04:50 Wilton Cleveland Uh, where were you at, were you? 00:04:52 Wilton Cleveland Kind of a. 00:04:52 Wilton Cleveland Tech geek in in at a young age. 00:04:55 Wilton Cleveland I mean what?

00:04:55 Wilton Cleveland What kind of motivated you to to to get into it? 00:04:58 Wilton Cleveland Or was it a a path that you kind of tripped across? 00:05:02 Jessica Hyde No yes no yes yeah. 00:05:05 Wilton Cleveland OK, thank you, thank you very. 00:05:09 Jessica Hyde Yeah, she answers. 00:05:10 Jessica Hyde High school, so I'll I'll try to answer those in the order you aflam, and there'll be some fun revelations here. 00:05:16 Jessica Hyde No high school no. 00:05:18 Jessica Hyde I was a high school dropout so techie younger life. 00:05:22 Jessica Hyde Yeah, I was writing my my first programs in basic at the age of 4. 00:05:26 Jessica Hyde Right on my uncle's Commodore 64. 00:05:26 OK. 00:05:28 Jessica Hyde It was I probably had a food before. 00:05:31 Debbie Garner I'm going with 64 Commodore 64. That's that's awesome.

00:05:35 Jessica Hyde

Yeah yeah you know, yeah, and you you said to write the line numbers 1070 thirty right? Like back then when you set the code with line numbers, UM.

00:05:40 Wilton Cleveland

Right?

00:05:43 Jessica Hyde

But but then I became a retail manager and I was living my best life in the East Village of New York City.

00:05:51 Jessica Hyde

I was, I was totally punk rock.

00:05:54 Jessica Hyde

Uhm like shaved head punk hairdo retail manager by day but hanging out in all the punk music clubs simpit at nights I used to do Rocky Horror like I was like in Moby Down 20S.

00:06:03 Debbie Garner

I love this.

00:06:08 Jessica Hyde

I was like.

00:06:10 Jessica Hyde

I was I was a lot of fun, but I was definitely not this person that I am.

00:06:16 Debbie Garner

We may, yeah.

00:06:17 Jessica Hyde

In Middle East.

00:06:17 Debbie Garner

We may have more similarities than I thought.

00:06:22 Jessica Hyde

So then September 11th.

00:06:23 Jessica Hyde

Happened and I like up and joined the marine.

00:06:27 Jessica Hyde

Corps too, because I realized in that moment I needed to do something that was more important than myself.

00:06:33 Jessica Hyde I was very personally affected. 00:06:35 Jessica Hyde I saw the towers fault my own two eyes. 00:06:37 Jessica Hyde It was the most traumatic thing that happened to me. 2001 was one of the worst years of my life. 00:06:44 Jessica Hyde I lost one of my roommates. 00:06:45 Jessica Hyde I lost my brother September 11th. 00:06:47 Jessica Hyde At the time I didn't I I had family members who I wasn't sure if they were alive or dead. 00:06:53 Jessica Hyde It was it was extremely traumatic. 00:06:54 Jessica Hyde And and it became this realization to me that I needed to do something that was bigger than myself. 00:07:02 Jessica Hyde And so I went and joined the Marine core just to GD. 00:07:06 Jessica Hyde The United States Marine core told me I had an aptitude for electronics and decided that I was going to be an idiotic. 00:07:14 Jessica Hyde Schmundt, so I spent my career in the marine core fixing harrier's, you know? 00:07:19 Jessica Hyde The Jets to take off. 00:07:20 Debbie Garner Yeah yeah, that's coolest jets. 00:07:21 Jessica Hyde Like the the coolest jets lunson true lies.

### 00:07:24 Jessica Hyde

I think that's the electrical systems on there and the marine core was the best thing I ever did.

## 00:07:30 Jessica Hyde

Uhm, if it wasn't for Marine Core, I wouldn't have known that I had an aptitude for electrical systems and it wouldn't have brought me back to those skills I had when I was younger when I was a good old fashioned nerd.

## 00:07:44 Jessica Hyde

When I was coding and diving before you know, I decided that freedom and fun were were the priorities of my life and I'm glad I had that time.

00:07:53 Jessica Hyde

In my late teens and 20s.

00:07:54 Debbie Garner

Everybody needs that everybody needs that time.

00:07:55 Jessica Hyde

Just to be.

00:07:56 Jessica Hyde

Honest, really glad I had that experience and it allowed.

### 00:07:59 Jessica Hyde

Me that when I became serious about school when I went back and got my engineering degree that I started while on active duty, which by the way, if anybody has ever tried to get a degree during wartime while on active duty, it takes way longer to get your undergrad than most people.

00:08:14 Jessica Hyde

Let's say it's just not a four year path because I had to drop courses, 'cause of deployments and pick.

00:08:19 Debbie Garner

Right, oh wow.

00:08:19 Jessica Hyde

Come back up again.

00:08:22 Jessica Hyde

But it was the right thing for me to do so I got.

00:08:25 Jessica Hyde

I think I went.

00:08:25 Jessica Hyde

To a total of five schools a.

00:08:28 Jessica Hyde

Little for my undergrad.

00:08:29 Jessica Hyde

Thank you for the servicemen opportunity.

00:08:32 Jessica Hyde

Credit Marine Core agreement which allowed.

00:08:34 Jessica Hyde

Tells people to it it basically forces universities to allow cryonic credit transfer, where otherwise it would not be accepted, so that I was able to go to a multiple different colleges while on active duty.

00:08:46 Jessica Hyde

Finished up shortly after, but if it wasn't for the Marine core, I met my spouse in the Marine core who and we've been married for.

00:08:53 Jessica Hyde

16 years I had my first child while on active duty, uhm.

00:09:00 Jessica Hyde

Anyway, and while on I, you know, became I soldered, I troubleshot all of those skills that I still use for hardware attacks today.

00:09:10 Jessica Hyde

So I got to the marine core with an engineering degree and the clearance.

00:09:14 Jessica Hyde

And so I went.

00:09:15 Jessica Hyde

Worked at as a contractor at the Terrace, Explosive Device, Analytical Center.

00:09:21 Jessica Hyde

Tidak reverse engineering IDs.

00:09:24 Jessica Hyde

That was my job admin form and that's how I got into forensics.

00:09:29 Jessica Hyde

So I started working on blown up phones.

00:09:32 Jessica Hyde

Uhm, and so that was kind of my bizarre path.

00:09:37 Jessica Hyde

So happenstance, yes, I haven't stanced into forensics because some said blown up devices were attached to phones.

00:09:43 Jessica Hyde

This is pretty smart phone, sure.

00:09:45 Jessica Hyde

And so you know as reverse engineering and getting data off of blown up mobile phones.

00:09:51 Jessica Hyde

And then I went and rounded out my career.

00:09:53 Jessica Hyde

I eventually got a masters degree.

00:09:55 Jessica Hyde

I now teach in a graduate program and I think that there's a really opportunity loan that you afforded me by this question.

00:10:04 Jessica Hyde

I'm going to stress again.

00:10:05 Jessica Hyde

I was a high school dropout.

00:10:06 Debbie Garner

Right?

00:10:07 Jessica Hyde

I didn't know what I.

00:10:08 Jessica Hyde

Wanted to do.

00:10:09 Jessica Hyde

And now I own my own company.

00:10:11 Jessica Hyde

I teach Graduate School.

00:10:13 Jessica Hyde

I've been a director of forensics for probably one of the largest digital forensics companies in the world.

00:10:19 Jessica Hyde

I've gotten to travel over the world.

00:10:21 Jessica Hyde

I've worked some of the most interesting cases I've got to develop.

00:10:24 Jessica Hyde

New techniques I've got to do things that were never done before and used my brain and my mind to make a difference.

00:10:31 Jessica Hyde

In the real world.

00:10:33 Jessica Hyde

And I say this to stress that it doesn't matter where you are today or where you came from.

00:10:39 Jessica Hyde

There were years where I would have never talked about the fact that I was a high school dropout.

00:10:43 Jessica Hyde

I was very ashamed and and then with age you realized that there is power in sharing that story and it's to let other people know that they can do.

00:10:53 Jessica Hyde

Anything and wherever you came from and whoever you were.

00:10:58 Jessica Hyde

Has nothing to do with who you are or who you can be or who you will be.

00:11:03 Jessica Hyde

So if you're out there going I love digital forensics, but I I, you know I don't have that traditional path.

00:11:10 Jessica Hyde

You don't need a traditional path.

00:11:12 Jessica Hyde The only path you need is yours. 00:11:14 Debbie Garner Absolutely, what a. 00:11:15 Debbie Garner Great point to make I I did not know these things about you and it did it. 00:11:22 Debbie Garner It's so interesting and so empowering for those people who may be feeling that way. 00:11:30 Debbie Garner So thank you for sharing that. 00:11:32 Debbie Garner That's that's absolutely incredible. 00:11:34 Jessica Hyde Thank you this is. 00:11:36 Jessica Hyde Going to sound weird, but September 11th was one of the worst days of my life. 00:11:40 Jessica Hyde And being able to turn that tragedy. 00:11:45 Jessica Hyde Into the thing that spawned me to be. 00:11:48 Jessica Hyde The technologist, the woman, the wife, the mother, the teacher. 00:11:54 Jessica Hyde The business owner. The forensic ater that I am today, is the biggest FU to the terrorists I could. 00:11:59 Jessica Hyde Have ever had? 00:12:00 Jessica Hyde And so I appreciate it. 00:12:01 Debbie Garner

I love that absolutely.

00:12:04 Debbie Garner

I love that.

00:12:04 Debbie Garner

Well, thank you.

00:12:05 Debbie Garner

Thank you for your service.

00:12:07 Debbie Garner

Also in.

00:12:08 Jessica Hyde

Thank you for your.

00:12:11 Debbie Garner

Well, thank.

00:12:11 Wilton Cleveland

You know I would.

00:12:12 Wilton Cleveland

I would say that I I do have to say this about especially the Marines or the OR the military.

00:12:17 Wilton Cleveland

Overall, I was in the Navy as well, so I was electrician's mate and I did a lot of soldering and all that kind of stuff.

00:12:23 Wilton Cleveland

As well and and.

00:12:23

Things still beats today.

00:12:24 Wilton Cleveland

And a lot of theory, yeah, absolutely.

00:12:27 Wilton Cleveland

I mean, and that's what helped me when I started doing forensics.

00:12:31 Wilton Cleveland

'cause I was kind of thrown into it and forced it was forced upon me.

00:12:35 Wilton Cleveland

They said you're going to do this and I'm like OK, and, uh, but that theory still sticks with you and especially those skills.

00:12:43 Wilton Cleveland

If you've if you've just cobbled them though a little bit right over the years, it it really makes a difference.

00:12:49 Wilton Cleveland

It makes it a lot easier to transition or it helped me a whole lot.

00:12:53 Wilton Cleveland

Transitioning into doing forensics so.

00:12:55 Jessica Hyde

And troubleshooting it's troubleshooting right, so?

00:12:56 Wilton Cleveland

Yes, absolutely.

00:12:59 Jessica Hyde

Troubleshooting skills are absolutely.

00:13:03 Jessica Hyde

Be critical to what we do in testing, verification, validation on basic data and so if you have that background from any other profession, that's awesome, like there's none of credit given to lat movers, and I think that they can provide diverse perspectives.

00:13:08 Wilton Cleveland

Right?

00:13:22 Jessica Hyde

That are super valuable.

00:13:23 Wilton Cleveland

Yeah, absolutely.

00:13:24 Debbie Garner

That's a good point also.

00:13:26 Debbie Garner

So Jessica, you've recently started Heck Sordia, tell us tell us about heck Sordia.

00:13:32 Debbie Garner

How did that come to be?

00:13:34 Jessica Hyde

Sure, uhm, so there's kind of this pattern in my career which I didn't just get into there.

00:13:39 Jessica Hyde

Where you know, I.

00:13:41 Jessica Hyde

I found myself in being mission oriented in the marine core.

00:13:45 Jessica Hyde

Then I went to.

00:13:45 Jessica Hyde

Tidak and then.

00:13:46 Jessica Hyde

I well rounded myself, went to Eva and I felt drawn back permission.

00:13:50 Jessica Hyde

I went to national Media exploitation center.

00:13:52 Jessica Hyde

I spent many years literally in the mobile forensics team, and then I went to Magna and I have loved.

00:13:58 Jessica Hyde

Working at magnet forensics.

00:14:00 Jessica Hyde

Amazing company, amazing people.

00:14:03 Jessica Hyde

Best experience in the world.

00:14:04 Jessica Hyde

But at the end of the day, there's still this draw for me to be back doing mission.

00:14:08 Jessica Hyde

Work and I get to do two really cool things with hex already.

00:14:13 Jessica Hyde

It's number one hits already is focused on government service contracts in training and forensic services for DoD and IC, which is back to my roots.

00:14:22 Debbie Garner

Right?

00:14:23 Jessica Hyde

Doing work with the Department of Defense, but then secondly.

00:14:28 Jessica Hyde

It it allows me the opportunity to really help with that mission of trying to.

00:14:35 Jessica Hyde

Make digital forensics more accessible to folks who are going nontraditional routes.

00:14:42 Jessica Hyde

What about my story would make you think that that's a little bit of a?

00:14:46 Jessica Hyde

And and and so I've been able to. Oh heck, sorry has been able to partner with Cyber 5W and I have fantastic a team at Hexadiene.

00:14:46 Debbie Garner

I love it.

00:14:58 Jessica Hyde

He's helping with tech writing and everything else, and we were able to partner with Cyber 5 W Who's currently offering courses.

00:15:05 Jessica Hyde

In Windows and Linux forensics that are accessed.

00:15:10 Jessica Hyde

Simple, every course is digestible and probably 8 to 10 hours each on specific topics they are.

00:15:20 Jessica Hyde

Affordable, they're either free or \$50 there's.

00:15:24 Jessica Hyde

A cap in terms of you know the maximum units then, which is still very affordable.

00:15:29 Jessica Hyde

Even if you were.

00:15:30 Jessica Hyde

To do every course.

00:15:32 Jessica Hyde

And heck, Sordia has paired and we are writing the mobile forensics curriculum, which I think it's going to be great specifically for fans of Gray shift because we're going to teach a lot of the fundamentals of acquisition and analysis Android.

00:15:52 Jessica Hyde

Uhm, iOS and some real basics that you know as as well as some advanced topics and.

00:16:01 Jessica Hyde

And providing those educations and resources at an affordable rate.

00:16:07 Jessica Hyde

And then one of the other things that we're really focused on is we're developing certifications for the Windows Courses, Linux courses, the mobile forensics courses right now.

00:16:16 Jessica Hyde

So these courses should be available.

00:16:19 Jessica Hyde

Uhm, soon they're we're just writing all the labs.

00:16:23 Jessica Hyde

They've all got hands on components, knowledge checks, it's it's really, really cool.

00:16:27 Jessica Hyde

I'm really excited about what we're building, but then the certification when I'm really excited about this, is again very accessible.

00:16:37 Jessica Hyde

You can do a pass, or you can just do what you need.

00:16:39 Jessica Hyde

We can just.

00:16:40 Jessica Hyde

Go for the certifications again.

00:16:43 Jessica Hyde

They'll be very affordable.

00:16:45 Jessica Hyde

And but not only do you conduct an exam, you.

00:16:47 Jessica Hyde

Have to.

00:16:47 Jessica Hyde

Write a report and what?

00:16:49 Jessica Hyde

I what I really like about this is.

00:16:53 Jessica Hyde

A couple of things.

00:16:54 Jessica Hyde

Number one by producing the forensics report.

00:16:58 Jessica Hyde

You're not only demonstrating that you know how to parse and understand data, it's not just the knowledge questions.

00:17:04 Jessica Hyde

It's not just the decoding data, it's knowing how to explain it.

00:17:10 Jessica Hyde

Represent it speaks with and reports for our product.

00:17:11 Debbie Garner

Right?

00:17:13 Jessica Hyde

At the end of the day, right?

00:17:14 Debbie Garner

Absolutely right.

00:17:15 Jessica Hyde

That's that's what we put out our our reports.

00:17:18 Jessica Hyde

Our analysis.

00:17:21 Jessica Hyde

But it also demonstrates that somebody knows how to.

00:17:23 Jessica Hyde

Write and what's?

00:17:24 Jessica Hyde

Even cooler is because of the rotation of the exams and how frequently it'll be rotated.

00:17:29 Jessica Hyde

For people who are trying to build their portfolio, their workbook.

00:17:33 Jessica Hyde

This is something you can bring to a prospective employer and not only do you say I've earned this certification, but you can say here's a copy.

00:17:40 Jessica Hyde

Of my type of analysis of the way that I write a report showing my education, my training, my skills, and conducting a forensics exam.

00:17:50 Jessica Hyde

What better sense does that give an employer of your ability to write?

00:17:54 Jessica Hyde

Because I think we've all been there with friends examiners who could use some more writing skills.

00:18:00 Jessica Hyde

It's very important.

00:18:02 Jessica Hyde

But the ability to explain things in an executive summary, the ability to explain technical, complicated topics.

00:18:10 Jessica Hyde

The ability to understand how to include commentary from your analysis and your experience versus fact, and how to balance.

00:18:21 Jessica Hyde

All of that and appropriately stated in a report, is absolutely critical because we are testifiers to the fact of the data and the evidence.

00:18:28

Right?

00:18:29 Jessica Hyde

And and not our opinions on content.

00:18:32 Jessica Hyde

That's really critical.

00:18:33 Debbie Garner

Huh, absolutely, absolutely agreed.

00:18:34 Jessica Hyde

So remember, not our specialty matter.

00:18:37 Jessica Hyde

So yeah, so I'm really excited about our method of certification, the accessibility of the content, the ability that if you just want to.

00:18:47 Jessica Hyde

You know?

00:18:48 Jessica Hyde

Skill up in one area or have a refresher on something that's maybe pertinent to an exam.

00:18:52 Jessica Hyde

You can do that in that area.

00:18:55 Jessica Hyde

Or you can follow a pathway.

00:18:56 Jessica Hyde

If you're learning, and then there's an opportunity for a technically difficult and realistic exercise where not only do you have to show your technical competence, but you also have.

00:19:07 Jessica Hyde

To be able to report.

00:19:09 Debbie Garner

So two comments on that.

00:19:11 Debbie Garner

As a former law enforcement manager, I love the fact that they that you are requiring them to write a report that absolutely is.

00:19:22 Debbie Garner

Is critical and you're correct.

00:19:24 Debbie Garner

Not everyone knows how to do that, and and knowing you know, having that skill is absolutely imperative.

00:19:32 Debbie Garner

And the second thing is, you know, I came from a law enforcement background, not a digital forensics background.

00:19:39 Debbie Garner

I was more operational, administrative.

00:19:43 Debbie Garner

Investigative I don't have a digital forensics background and I.

00:19:48 Debbie Garner

Actually plan on taking some classes from.

00:19:52 Debbie Garner

From the the new venture between Hex Ordea and Cyber 5 W.

00:19:56 Debbie Garner

Because now that I am in this particular role, I feel as though I would like to.

00:20:03 Debbie Garner

Have more knowledge in that area and I think that what you're offering the easily digestible.

00:20:10 Debbie Garner

You know classes.

00:20:12 Debbie Garner

That's probably going to benefit me as well.

00:20:16 Jessica Hyde

And nothing wrong with.

00:20:18 Jessica Hyde

Like if you have a week.

00:20:20 Jessica Hyde

To get immersive and study for a week and take all that information and that is amazing, but it's also not everyone learning style, right?

00:20:29 Jessica Hyde

There is something about doing something that's in smaller chunks that I think and then also seeing your success as you go through those smaller chunks.

00:20:38 Jessica Hyde

Being able to review that content.

00:20:41 Jessica Hyde

I think it's beneficial and fits different learning styles, but also different prime management capabilities depending on if you trolled a lot with bowl or we all have different.

00:20:47 Debbie Garner

Right?

00:20:51 Jessica Hyde

So I think just having another type of option out.

00:20:55 Jessica Hyde

There for people.

00:20:55 Jessica Hyde

To have access to that's approaching this education in a different way is important, and both Ali and I both.

00:21:02 Jessica Hyde

Right, Ali Hardy is the founder of C Faiyaz Suburb 5W and we both have.

00:21:11 Jessica Hyde

Very different approaches as we both also teach in universities and that is a completely different structure and way of teaching the same concepts as we're trying to do in these bite sized courses.

00:21:23 Jessica Hyde

They're very.

00:21:24 Debbie Garner

Right, right so?

00:21:25 Wilton Cleveland

Well, it's nice to hear that those courses are going to be at a beginner level as well because there's there's so so much in the digital forensics world they they throw you to the sharks and you're you're supposed to be every course.

00:21:37 Wilton Cleveland

It seems like you need to be at least at the intermediate level and above, and so some of these guys coming in, and they're really rather intimidated.

00:21:44 Wilton Cleveland

I mean the 1st.

00:21:46 Wilton Cleveland

Digital forensics courses I took.

00:21:48 Wilton Cleveland

I felt like I was drinking water out of a firehose.

00:21:50 Wilton Cleveland

I mean, it was kind of overwhelming and I think the only thing that helped me was was my prior training.

00:21:57 Wilton Cleveland

In the military you know, so that's the only thing that kept my head above water.

00:22:01 Wilton Cleveland

But for some people they're just lost until they have a lot of trial and error.

00:22:05 Wilton Cleveland

So educated.

00:22:06 Jessica Hyde

And for clarity.

00:22:07 Jessica Hyde

There's advanced topics in there too, but so if you just want to go for those you can 'cause it's modular.

00:22:09 Wilton Cleveland

Sure, sure.

00:22:13 Jessica Hyde

We also don't force you to go do the things you.

00:22:15 Jessica Hyde

Already know how.

00:22:15 Debbie Garner

Right?

00:22:15 Jessica Hyde

To do if you feel you're comfortable already with a topic and you can, you can just go ahead and go after the topic you need.

00:22:21 Wilton Cleveland

Sure, that's great.

00:22:23 Jessica Hyde

But for people who this is new, we want it to be accessible.

00:22:27 Jessica Hyde

And and that's just really, I think, one of the most important things is is that accessibility?

00:22:33 Jessica Hyde

Just like you're saying 'cause it can be like drinking out of a firehose, and then what kind?

00:22:36 Jessica Hyde

Of retention are you getting?

00:22:38 Wilton Cleveland

Right now.

00:22:39 Wilton Cleveland

A lot, not a lot for sure.

00:22:40 Debbie Garner

You know you make.

00:22:41 Debbie Garner

It you actually made a good point Wilton in that earlier you said you were sort of told that you were going to do digital forensics and that happens a lot in law enforcement.

00:22:55 Debbie Garner

You know, like someone in the agency who knows a little bit about.

00:22:59 Debbie Garner

Computers, they become the digital forensics person without really ever intending to be that, and you know, they have to learn on their own, and so these these bite sized courses, you know for them to get started, I think is a perfect.

00:23:17 Debbie Garner Way to you know. 00:23:19 Debbie Garner For people who are in that situation. 00:23:22 Debbie Garner I know that you love supporting those, like entering the field of fire. 00:23:25 Debbie Garner That's kind of what we're talking about. 00:23:27 Debbie Garner You have some some interest in women in DFIR, and so I know that there's some social media like groups. 00:23:36 Debbie Garner Talk to us. 00:23:36 Debbie Garner A little bit about that.

00:23:38 Jessica Hyde

Debbie, that's a really interesting topic.

00:23:41 Jessica Hyde

I'm gonna I'm gonna start out with what I think is one of the most important things to be.

00:23:48 Jessica Hyde

Forward about the most important thing that anyone can do to support anyone getting into the field and the diversity in the field.

00:23:57 Jessica Hyde

Be that women be that bipac folk, be that elgg folk be that any marginalized community people coming from different parts of the world.

00:24:08 Jessica Hyde

People coming from different opportunities.

00:24:12 Jessica Hyde

Is to have them share their technical prowess?

00:24:17 Jessica Hyde

The number one thing you can do as leaders in the field, and you're right, Debbie.

00:24:23 Jessica Hyde

I do a lot of things for people who are new in the field, but I also meant to work with a lot of people who are senior who are doing career shifts who are moving from law enforcement at the end of their law enforcement career into.

00:24:37 Jessica Hyde

As you just did recently into their second digital forensics career, et cetera.

00:24:42 Jessica Hyde

Yeah, but there is so much we can do.

00:24:48 Jessica Hyde

As leaders in the field.

00:24:54 Jessica Hyde

Giving the microphone to the people who need it.

00:24:58 Jessica Hyde

I encourage people to participate in any opportunity to share their platforms and their microphones with others.

00:25:09 Jessica Hyde

I'm a big proponent of share the MIC and cyber.

00:25:12 Jessica Hyde

I've had the pleasure of participating.

00:25:15 Jessica Hyde

Twice and being able to provide my Twitter platform in my LinkedIn platform to bipac folks who are who are moving up and I've had fantastic.

00:25:25 Jessica Hyde

Uhm, people who have been able to help elevate through that.

00:25:32 Jessica Hyde

Uhm, in terms of the right thing to do, the right thing to do.

00:25:38 Jessica Hyde

Is recognizing that.

00:25:39 Jessica Hyde

Some of the.

00:25:40 Jessica Hyde

Top people in our field come from all different backgrounds, all different genders, all different expressions.

00:25:48

OK.

00:25:50 Jessica Hyde

And I mean you can go look at the 54 episodes that I lovingly got to do cash up, which are all there on all your streaming platforms and hear great interviews with people from all different backgrounds and why? Because they're the top people in the field. And so to me, the number one thing is.

00:26:08 Jessica Hyde

Allowing people to show their technical prowess.

00:26:12 Jessica Hyde

Uhm, I also think that it's important that we don't continue the Unicorn missiles.

00:26:18 Jessica Hyde

In other words, there are brilliant women in DFIR brilliant women so.

00:26:25 Jessica Hyde

Heather Mahalik Marie Degrazia Alissa Torres Jamie Levy I could go on Julia Louis I could go on a Shelly Gissberg Heather Smith I could go on for an hour naming some of the most spectacular people in forensics who are women.

00:26:42 Jessica Hyde

I could go on forever naming.

00:26:45 Jessica Hyde

Some of the most brilliant people in forensics.

00:26:48 Jessica Hyde

Who are black or indigenous?

00:26:50 Jessica Hyde

Your Douglas brand juniors?

00:26:53 Jessica Hyde

Uh, I'm sorry Rob do heart Ellen right.

00:26:58 Jessica Hyde

There are such brilliant people doing brilliant work and the number one thing is to.

00:27:06 Jessica Hyde

Give them the platform to be brilliant and to talk about technical.

00:27:09 Jessica Hyde

Topics not talking about what it's like to be a person I.

00:27:15 Jessica Hyde

Feel that those.

00:27:16 Jessica Hyde

A person who is different or in a minority in this space is.

00:27:20 Jessica Hyde

Personally, I feel the platform for that is speaking within those communities to empower each other.

00:27:27 Jessica Hyde

So in terms of that I'll speak about a couple of really cool.

00:27:31 Jessica Hyde

Initiatives that I've been able to support that I love that are focused on.

00:27:39 Jessica Hyde

Providing opportunities to people very earlier in their career to come up up so Cybersleuth Labs, which is ran by Darryl Fife, who's a fantabulous examiner.

00:27:54 Jessica Hyde

She's down in Louisiana, runs her own company, her and doctor.

00:27:59 Jessica Hyde

Oh, and Casey, who I feel like everyone knows, uh?

00:28:03 Jessica Hyde

Our partners in Cyber Sleuth Labs, which is a non profit organization that I am privileged to be on the Advisory Board for that focuses on bringing education about digital forensics to high school aged women and underrepresented minorities in inner cities.

00:28:21 Debbie Garner

Love that.

00:28:21 Jessica Hyde

How amazing is that?

00:28:22 Jessica Hyde

And they do it.

00:28:23 Jessica Hyde

Through like the coolest platform with case scenarios that are really meant for that age group that they can latch onto that are realistic to the real situations in their life.

00:28:36 Jessica Hyde

Lives and letting people who otherwise again all about accessibility know about.

00:28:42 Jessica Hyde

The fact that the field exists I am fortunate and honored to volunteer with a fantastic organization that actually Brian Moran turned me on to when we were doing the D for fit fundraiser at the magnet user Summit in 2019 and then into 2020, which is play like a girl which is.

00:29:02 Jessica Hyde

A nonprofit of Nashville that is targeted at middle school girls.

00:29:09 Jessica Hyde

Uhm, learning about stem through sports about the intersection.

00:29:14

That's so cool.

00:29:16 Jessica Hyde

Of physical activity and sports to be involved with Sam and I was lucky to last year be a facilitator mentor.

00:29:25 Jessica Hyde

I got to meet with these girls once a week and spend time with them and they got to do the most amazing things including.

00:29:34 Jessica Hyde

Actually, building platforms to teach other girls their age about financial literacy, and they got to.

### 00:29:41 Jessica Hyde

For finances to actually fund those projects, some of those girls have actually already launched businesses, and these are middle school girls in Nashville and the program is expanding and it's fantastic and and just a a privilege to to be one of the volunteers involved.

00:29:59 Jessica Hyde

With play like.

00:29:59 Jessica Hyde

A girl and I say this.

00:30:01 Jessica Hyde

Well to say that you can get into your communities, you can get local.

00:30:06 Jessica Hyde

Obviously I volunteer with the Astero project which helps nonprofits.

00:30:11 Jessica Hyde

It's a it's a nonprofit arm that mag that started to pair digital forensics examiners with skills with non prod.

00:30:17 Jessica Hyde

Prophets and other needy organizations that need digital forensics assistance and expertise.

00:30:23 Jessica Hyde

And I think that there's this premise of giving back that's so critical I wrote on.

00:30:31 Jessica Hyde

I wrote a.

00:30:31 Jessica Hyde

Post when I was a full time with magnet.

00:30:35 Jessica Hyde

Uhm called the fire hierarchy.

00:30:38

Of leaks.

00:30:39 Jessica Hyde

And it was like the base of Maslow's hierarchy of needs and the bottom level was getting your fundamental training.

#### 00:30:47 Jessica Hyde

And then the next level was doing independent coursework and then a third level was sharing like what we were talking about earlier on on Twitter and sharing information and writing blog posts and academic papers, whatever.

00:30:54 Debbie Garner

Right?
00:30:58 Jessica Hyde
Sharing your knowledge.
00:31:00 Jessica Hyde
And then the next here is giving back.
00:31:02 Jessica Hyde
It's how do we use our digital forensics skills to help our communities?
00:31:08 Jessica Hyde
Can you volunteer and share with your local domestic violence shelters?
00:31:14 Jessica Hyde
About how to protect yourself from cyber stalking?
00:31:18 Jessica Hyde
Can you use your skills to?
00:31:20 Jessica Hyde
Next time you're in a cab, try traveling somewhere.
00:31:22 Jessica Hyde
Let your cab driver or your Uber driver know about the importance of multifactor authentication.
00:31:28 Jessica Hyde
How are we using our skills for?
00:31:30 Jessica Hyde
Good to better the world, not just in the casework we do every day.
00:31:34 Jessica Hyde
'cause we all better the world by being digital forensics examiners.
00:31:36 Debbie Garner
Right?
00:31:37 Jessica Hyde
But how can we take the next?
00:31:38 Jessica Hyde
Level and give back.

### 00:31:40 Jessica Hyde

And wherever your passion is from helping women get into digital forensics to helping people in your community, to helping senior citizens, I'm actually going to be speaking.

## 00:31:52 Jessica Hyde

In my local community to a group of senior citizens about securing their privacy and I'm just doing that one evening next month to to give back to my.

## 00:32:03 Jessica Hyde

Community and I encourage all of us who have that digital skill to find those moments wherever they are to give back.

## 00:32:13 Jessica Hyde

It can be through mentorship, it can be through education, but it can also be local.

00:32:18 Jessica Hyde

It could be through your local faith group.

00:32:20 Jessica Hyde

It could be through your local contact.

00:32:23 Jessica Hyde

Their civic organizations, whatever works for you personally, or it could be at a larger scale or through a large nonprofit like Cyber Sleuth or play like a girl.

00:32:32 Jessica Hyde

But I just encourage everybody you've got incredible skill.

00:32:35 Jessica Hyde

Skills and incredible things that you can do to give back no matter where you are.

00:32:39 Jessica Hyde

There is a fantastic young forensics examiner.

00:32:43 Jessica Hyde

She just graduated this year.

00:32:45 Jessica Hyde

I'm going to highlight her Mattie Brumbelow.

00:32:47 Jessica Hyde

I met her because she was one of the students at Champlain who was helping build the magnet CTF last year.

00:32:57 Jessica Hyde

And while talking to her, discover that.

00:32:59 Jessica Hyde

While in college.

00:33:01 Jessica Hyde

She developed pre K.

00:33:03 Jessica Hyde

Go ahead.

00:33:04 Jessica Hyde

A nonprofit to take old laptops, refurbish them and bring them to schools to help girls who have no access to computers around the world.

00:33:14 Jessica Hyde

I believe they flew to I.

00:33:17 Jessica Hyde

I can't remember what country but it was.

00:33:19 Jessica Hyde

Uhm, might have been Madagascar.

00:33:23 Jessica Hyde

I but I don't quote me.

00:33:24 Jessica Hyde

They went and refurbished computers and brought them overseas to bring them to a school that had no computer access.

00:33:32 Jessica Hyde

A girls school to provide access and.

00:33:35 Jessica Hyde

Then with the impact of COVID-19, they.

00:33:38 Jessica Hyde

Were able to.

00:33:39 Jessica Hyde Broaden that charity. 00:33:40 Jessica Hyde It's called tech dren like text for children. 00:33:43 Jessica Hyde One word techtron to do to to and the members of the Digital Forensics association at Champlain. 00:33:49 Jessica Hyde Those students who are members of texture in this nonprofit, they 00:33:54 Jessica Hyde Correctly from their forensics knowledge and securely wipe and reset these computers so they can be used by school children who do not have access to computers which has brought in and helped in education. 00:34:06 Jessica Hyde And when schools went online, their charity became pivotal because they would already exist. 00:34:10 Jessica Hyde So it doesn't matter where you are, you could be a student. 00:34:13 Jessica Hyde There's a way that you can help and use your skills for good, sorry. 00:34:18 Debbie Garner I'd no I love that yeah no. 00:34:18 Jessica Hyde Thanks for the great question. 00:34:20 Debbie Garner I love that I absolutely love that. 00:34:23 Debbie Garner So so related, but pivoting just a little bit. 00:34:29 Debbie Garner The three of us had had a conversation recently regarding lawful access. 00:34:33 Debbie Garner

And the mission of digital forensics being truth seeking and data collection you've already mentioned, you know, keeping our opinions out of it?

00:34:43 Debbie Garner

It's simply truth seeking and we discussed the fact sort of that law enforcement.

00:34:48 Debbie Garner

There's a debate in the world law enforcement has.

00:34:52 Debbie Garner

Access to tools and training that that non law enforcement doesn't necessarily have access to.

00:34:58 Debbie Garner

And I know that you had some thoughts on that and it's a frustration you know throughout some of the industry.

00:35:04 Debbie Garner

Can we sort of maybe discuss that?

00:35:06 Debbie Garner

I mean you had some perspective that I found particularly interesting.

00:35:10 Jessica Hyde

I love the fact that this show is not willing and not to to avoid the tough topics and is going and saying let's have a.

00:35:22 Jessica Hyde

True conversation about something that is a hotly contested and debated topic, and so the question here is, you know, is it appropriate that some training and tools are limited to law enforcement?

00:35:24 Debbie Garner

Right?

00:35:39 Debbie Garner

Right?

00:35:40 Jessica Hyde

So we'll we'll.

00:35:41 Jessica Hyde

We'll start with two pure, you know, truth one.

00:35:45 Jessica Hyde

Corporate organizations typically have the right to choose who their customers are and who they share things and who they train.

00:35:53 Jessica Hyde

But then it goes beyond that, because then there's this concept that in specifically in the United States we have a system of law that allows defense and prosecution equal access to evidence.

00:36:10 Jessica Hyde

Right, I would like to say that these things are not mutually exclusive to start law enforcement in many situations are in the position to have the legal authority to collect and seize evidence, right?

00:36:27 Jessica Hyde

When law enforcement collection seizes evidence if they are using techniques, be it.

00:36:34 Jessica Hyde

And let's be honest, there are a lot of and and I'm talking to folks from grade ship.

00:36:38 Jessica Hyde

So there are proprietary techniques that it's important for the integrity of the techniques as well as intellectual property reasons.

00:36:46 Jessica Hyde

Stay on proprietary now.

00:36:50 Jessica Hyde

Are there?

00:36:52 Jessica Hyde

Methods to validate 'cause I don't care what the tool is, if it's available to law enforcement or only or everyone.

00:37:00 Jessica Hyde

Any capability that uses intellectual property to acquire data.

00:37:05 Jessica Hyde

There are two things that need to happen.

00:37:07 Jessica Hyde

Number one.

00:37:08 Jessica Hyde

People need to know how to create test images and verify and validate that the tool is functioning and doing the function it's supposed to do without altering or modifying the data or doing so in such a way that its footprint is understood.

## 00:37:25 Jessica Hyde

That's table stakes for forensics and you can look at documents from for example to swing the East Scientific Working group on digital evidence from NIST National Institute of Standards and Technology.

00:37:38 Jessica Hyde

Or even the documents that are in work and coming out from 4 mobile in the EU around how to do verification and validation.

00:37:47 Jessica Hyde

And now these methodologies.

00:37:51 Jessica Hyde

When done properly, should get rid of any concern about black box forensics, right?

00:37:58 Jessica Hyde

Because you can take a known good and validate that it works and that you understand the process and that what you get is what you expected and that it hasn't been modified.

00:38:07 Jessica Hyde

So that provides and.

00:38:10 Jessica Hyde

Not only does law enforcement and people who use the tools have the responsibility to do that, but NIST lovingly puts out reports and I know that they have specifically, for example, tested grachi.

00:38:22 Jessica Hyde

I've looked at the report.

00:38:23 Jessica Hyde

Right so people.

00:38:24 Debbie Garner

Right?

00:38:24 Jessica Hyde

To have that assurance now, are there things that could be improved in our Community as we mature in terms of maybe bodies that test and validate tools?

00:38:35 Jessica Hyde

Absolutely, because it's a full time job.

00:38:37 Jessica Hyde

If you would test and validate every version.

00:38:39 Jessica Hyde

Of every tool, all.

00:38:39 Debbie Garner

Oh, absolutely yes.

00:38:40 Jessica Hyde

Know that.

00:38:41 Jessica Hyde

And are there ways that maybe we can be smart about sharing, testing and reports?

00:38:46 Jessica Hyde

Of those test results from certified labs, yes, there's then this certified forensics tool.

00:38:52 Jessica Hyde

Testing programs start to work towards that, yes, is there room to grow?

00:38:55 Jessica Hyde

Of course, so there are great standards bodies.

00:38:59 Jessica Hyde

With SAP Slick, D, Enis or mobile that are addressing these issues and providing methodologies for people to conquer that.

00:39:08 Jessica Hyde

So once you have that.

00:39:11 Jessica Hyde

The next step is to say, and this is we're conquering the tools portion before.

00:39:16 Jessica Hyde

If a forensic image is provided and the chain of custody and methodology has been documented and maintained, which is which is required to be turned over the forensic image in its entirety is what gets turned over to.

00:39:30 Jessica Hyde

The other right.

00:39:31 Jessica Hyde
So that means.
00:39:33 Jessica Hyde
Both sides have equal access to the acquisition that was acquired.
00:39:39 Jessica Hyde
That is, that is what is legally required and also what gives the basis on that.
00:39:39 Debbie Garner
We have to yes.
00:39:45 Jessica Hyde
So from a tool perspective.
00:39:47 Jessica Hyde
Uhm, yes, from an analysis tool perspective.
00:39:55 Jessica Hyde
You can do anything by hand.
00:39:57 Jessica Hyde

You should be able to know and how I understand that speed is of issue, but at the end of the day verification and validation methodologies need to exist such that you should be able to magically.

00:40:08 Jessica Hyde

You shouldn't be relying on magically finding results because you need to verify and validate if it's for your case, so you need to know how to do it technically and again if a.

00:40:19 Jessica Hyde

Proprietary algorithm is being used.

00:40:21 Jessica Hyde

Let's say for decryption with a known password or a brute force attack.

00:40:25 Jessica Hyde

Again, you test and validate.

00:40:27 Jessica Hyde

It by using known data and creating the test scenario to prove what is what the process is and then it is valid to be used and so that can.

00:40:35 Jessica Hyde

Be done by both sides. 00:40:40 Jessica Hyde Question of training. 00:40:45 Jessica Hyde I think that it is important. 00:40:48 Jessica Hyde That people. 00:40:51 Jessica Hyde Has equal access. 00:40:55 Jessica Hyde To all analysis. 00:41:01 Jessica Hyde That are publicly available. 00:41:03 Jessica Hyde In other words, if it isn't governed by by governments, etc. 00:41:05 Right? 00:41:07 Jessica Hyde And that people. 00:41:09 Jessica Hyde But that does not include the use of how to use necessarily the acquisition tool in that trading. 00:41:14 Jessica Hyde Does that make sense? 00:41:15 Debbie Garner Yes it does. 00:41:15 Jessica Hyde Because lawful access? 00:41:17 Jessica Hyde

Needs to be protected.

00:41:21 Jessica Hyde

So that.

00:41:22 Jessica Hyde

Only people who have been granted legal lawful access can do.

00:41:27 Jessica Hyde

Some of those accesses and also to protect the technology because we do have a cat and mouse existence, right?

00:41:34 Jessica Hyde

We know that.

00:41:35 Jessica Hyde

We know that vision first language.

00:41:35 Debbie Garner

Right, yeah, absolutely.

00:41:38 Jessica Hyde

So we need to protect things so that when law enforcement does have legal access, they can act on that legal access.

00:41:45 Jessica Hyde

And again, as long as the forensic image is being provided equally to both parties, now again education and training.

00:41:55 Jessica Hyde

The technologies and methodologies.

00:41:57 Jessica Hyde

There are plenty of organizations that do training to anyone and everyone.

00:42:03 Jessica Hyde

For example Sam's right and and maybe there are limitations about working with governments or organizations that you may not be able to work with based on your host country that you're from and stuff that's.

00:42:13 Jessica Hyde

All legal stipulations.

00:42:14 Jessica Hyde

So I'm excluding that.

00:42:16 Jessica Hyde

But the defense and like so, like if you're an American, you may not be able to go teach your course in north North Korea, right?

00:42:16 Debbie Garner

OK.

00:42:24 Jessica Hyde

Or K, right?

00:42:25 Jessica Hyde

Like so, excluding DPRK and things like that?

00:42:28 Jessica Hyde

But there are courses that are available to most examiners, right?

00:42:32 Jessica Hyde

The companies sell to most examiners and basic knowledge that is accessible.

00:42:37 Jessica Hyde

Now, are there groups that restrict access to just law enforcement?

00:42:46 Jessica Hyde

Is it OK to?

00:42:47 Jessica Hyde

Have a body in Full disclosure right so?

00:42:53 Jessica Hyde

Well, I'm a member of HCI High Tech Crime Investigation Association.

00:42:57 Jessica Hyde

QQ does not allow people who are in defense or do you work on the defense that are paid to do work for in a defensive?

00:43:04 Jessica Hyde

They do pro bono case.

00:43:05 Jessica Hyde

Usually that's allowed.

00:43:06 Jessica Hyde

There can be exemptions.

00:43:07 Jessica Hyde

There's we please read their by laws.

00:43:10 Jessica Hyde

But HTC limits to people who do not do defense work, so they allow corporate people to.

00:43:17 Jessica Hyde

To participate, so let's say you're a corporate examiner internally, but not people, and I think that this is an important thing to exist so people can feel comfortable in their discussions, so people can have honest and frank discussions.

00:43:33

Right?

00:43:35 Jessica Hyde

I don't think there's anything wrong with it, as long as equal access is available to the image and the content.

00:43:41 Jessica Hyde

So, for example, Magna Forensics does a course with breakey.

00:43:46 Jessica Hyde

Right where they keep Gray key and then they teach advanced analysis.

00:43:47

Right?

00:43:50 Jessica Hyde

The full file system acquisitions.

00:43:52 Jessica Hyde

That Gray key makes avail.

00:43:54 Jessica Hyde

They teach the same exact course, minus the grachi portion on how to analyze the evidence that comes from that.

00:44:03 Debbie Garner

Right?

00:44:04 Jessica Hyde That's available to anyone. 00:44:08 Jessica Hyde So that is equal access to analysis, right? 00:44:11 Jessica Hyde And I think that that makes us. 00:44:12 Debbie Garner The same training, right? 00:44:14 Jessica Hyde The same training, the same concepts, and so are there going to be. 00:44:18 Jessica Hyde Yeah, you can't. 00:44:21 Jessica Hyde You can't say that that's incorrect. 00:44:23 Jessica Hyde That's completely correct. 00:44:24 Jessica Hyde Everybody has access to the image because that finding the evidence in the data is what is needed to be. 00:44:34 Jessica Hyde And that content that that course the analysis portion of the course. 00:44:39 Is the same. 00:44:40 Jessica Hyde Right, I've even for for last year's magnet user summit. We actually used a great key acquisition so that there would be because it was just analysis so that there would be a sample out there in the community.

00:44:57 Jessica Hyde

Of an iOS full file system image from a grachi that people were able to practice and analyze and compete on, and I think that when things like that are provided, we are creating as a community of.

00:45:11 Debbie Garner

That full access also yes. 00:45:13 Jessica Hyde And so that was my intent in doing that, right? 00:45:15 Jessica Hyde Was because I knew that not everybody had access to those images, but people should have a test image from a grachi if they're going to be doing any kind of analysis of it in the future. 00:45:24 Jessica Hyde That's a known test image. 00:45:26 Jessica Hyde Sorry I does that answer your question then yeah, that's resolved according to Jessica. 00:45:27 Debbie Garner No, absolutely no, no, absolutely no. 00:45:32 Debbie Garner It's just an interesting perspective. 00:45:33 Jessica Hyde This was not reflective of my prior employers. 00:45:35 Debbie Garner And we won't. 00:45:36 Debbie Garner We won't solve. 00:45:36 Debbie Garner The debate you know here today, but it's. 00:45:40 Debbie Garner Just it's an interesting perspective in in that regard, so I I mean, I agree, yes. 00:45:44 I love you. 00:45:46 Wilton Cleveland You know weekends weekend. 00:45:46 Jessica Hyde

All these are valid. 00:45:48 Wilton Cleveland Absolutely could have a we could. 00:45:49 Wilton Cleveland We could do a whole podcast just on on that. 00:45:52 Debbie Garner Buffalax S absolutely. 00:45:54 Wilton Cleveland Yeah, absolutely. 00:45:54 Jessica Hyde And you know. 00:45:55 Jessica Hyde

I would love to have a conversation with folks who feel differently about that so that we can address the issues so we can say what are the questions, what isn't working and how do we move forward in a way that protects the innocent, maintains the integrity of data.

00:46:13 Jessica Hyde

And provides everyone a opportunity to a lawful.

00:46:19 Debbie Garner

Yes, absolutely.

00:46:20 Jessica Hyde

Our goal is the same truth in it.

00:46:21 Debbie Garner

Seeking truth that that is that that.

00:46:25 Debbie Garner

Is absolutely the goal.

00:46:26 Debbie Garner

Is just to seek the truth.

00:46:28 Debbie Garner

Uhm, and getting the you know the the appropriate data to do that so.

00:46:36 Wilton Cleveland

Yeah, so we're going to move on just a little bit.

00:46:39 Wilton Cleveland

Sort of the same I guess.

00:46:42 Wilton Cleveland

But I know you've seen some changes over over your time in digital forensics, So what?

00:46:47 Wilton Cleveland

What are some of the biggest changes that you've seen since you started in the field?

00:46:50 Wilton Cleveland

'cause I know I've seen quite a few myself and I think you've been doing a little bit longer than I have.

00:46:55 Jessica Hyde

There have been many changes.

00:46:57 Jessica Hyde

I would say number one thing you know things that I love is now that there are dedicated educational programs that are training people to start in digital forensics.

00:47:06 Jessica Hyde

It is fantastic that that can be a path straight out of high school into university to study digital forensics.

00:47:13 Jessica Hyde

And I know some amazing people who I met when they were.

00:47:16 Jessica Hyde

In high school Nick, the boy I'm talking to you who have gone on to go into.

00:47:21 Jessica Hyde

College for the field and have now launched their own companies like incredible folks who you know figured out they wanted to do this when they were 14.

00:47:28 Jessica Hyde

And that's a completely different thing.

00:47:29 Jessica Hyde

'cause when?

00:47:29 Jessica Hyde

I was 14. 00:47:30 Jessica Hyde This field didn't exist right? 00:47:32 'cause I know. 00:47:34 Jessica Hyde One of the other things that I've seen that's been a major change and I think is. 00:47:38 Jessica Hyde One of the most. 00:47:38 Jessica Hyde Important things is that morphics examiners now. 00:47:44 Jessica Hyde Know how to code. 00:47:47 Jessica Hyde And this is really, really really critical, because you're going to have to parse and test artifacts. 00:47:55 Right? 00:47:57 Jessica Hyde I would say one of the other things that I love is.

00:48:03 Jessica Hyde

The acceptance of each other that no matter how new somebody is in the field, that they have something to contribute because people who are students or just learning on their own or doing this as.

00:48:16 Jessica Hyde

A hobby are.

00:48:17 Jessica Hyde

Constantly discovering, finding new things, and sharing James Duffy.

00:48:21 Jessica Hyde

All of his work last year is a great.

00:48:23 Jessica Hyde

Example, the stuff he did in iOS, which if anybody, if anybody is a user of the grachi or is a great customer in general, you should be reading James Duffy stuff because he's doing great research in the area of the the devices you're examining.

00:48:30 Debbie Garner

Right?

00:48:38 Jessica Hyde

And he started publishing when he was 19, right?

00:48:43 Jessica Hyde

So we're just so accepting of that.

00:48:44 Jessica Hyde

The challenge is we're we're running into so many challenges that aren't necessarily technical.

00:48:51 Jessica Hyde

I think that there's a lot of policy challenges, right?

00:48:54 Jessica Hyde

And I think that there are a lot of challenges that I'm seeing as we mature.

00:49:01 Jessica Hyde

Our profession is.

00:49:03 Jessica Hyde

Young and we don't necessarily have the bodies.

00:49:08 Jessica Hyde

To determine what is a qualified examiner, leaving Daubert and Frye out of it, and not everything is about being a court expert and a court.

00:49:19 Wilton Cleveland

Right?

00:49:20 Jessica Hyde

Expert is not necessarily an expert.

00:49:22 Jessica Hyde

I'm going to share my.

00:49:23 Wilton Cleveland

That's true.

00:49:24 Jessica Hyde

I'm going to share my favorite Niels Bohr quote.

00:49:27 Jessica Hyde

OK 'cause I have this whole discussion in university about what's an expert with my students and Niels Bohr is a physicist and it goes something like this.

00:49:37 Jessica Hyde

An expert is someone who has made all of the mistakes that artistic to make in a very niche area or field.

00:49:49 Debbie Garner

I like that.

00:49:50 Jessica Hyde

I'm gonna just stress that we have to make mistakes.

00:49:53 Jessica Hyde

We have to make mistakes to learn now.

00:49:53

Right?

00:49:54 Jessica Hyde

Don't make them in your report, test, validate and verify.

00:49:58

Right?

00:49:58 Jessica Hyde

But don't put them on the stand.

00:49:59 Wilton Cleveland

Yeah, that's the bad.

00:50:00 Wilton Cleveland

Place to make mistakes right?

00:50:00 Jessica Hyde

Verify, verify and validate before you put it out there, but in your assumptions in your testing.

00:50:07 Jessica Hyde

In your learning, we are all going to make mistakes and that is how we become experts.

00:50:15 Jessica Hyde

We only become experts by not having things work right every time.

00:50:18 Wilton Cleveland

That's right.

00:50:21 Jessica Hyde

I think that we have to mature and figure out how we are going to situate ourselves as a professional organization moving forward.

00:50:31 Jessica Hyde

That probably has to happen uniquely in different jurisdictions, but we do have a lot of policy issues that I think are the biggest things now, and I think that's the difference, right like?

00:50:42 Jessica Hyde

Years ago it used to be technical.

00:50:43 Jessica Hyde

It used to be people.

00:50:45 Jessica Hyde

Didn't know about computers, now everybody knows about computers.

00:50:48 Jessica Hyde

Computers are part of every crime.

00:50:49 Jessica Hyde

There's more data.

00:50:50 Jessica Hyde

There's sensors everywhere with IoT.

00:50:52 Jessica Hyde

Everyone got a phone in their pocket.

00:50:53 Jessica Hyde

There's Geo location data.

00:50:55 Jessica Hyde

We've got access, but

00:50:58 Jessica Hyde

What about how do we deal with cloud?

00:51:00 Jessica Hyde

How do we deal with the legal restrictions that are sometimes being put on AI?

00:51:01 Debbie Garner

Right?

00:51:04 Jessica Hyde

There's a lot of policy stuff that's happening right now, and I think it's incumbent among digital forensics examiners and people with that knowledge to be included in those decisions so that those nuanced points aren't missed.

00:51:18 Jessica Hyde

And that we're still able to do what we need to do, which.

00:51:21 Jessica Hyde

Is fine treatment if it's.

00:51:27 Debbie Garner

We absolutely agree, so we've thoroughly enjoyed our discussion with you.

00:51:33 Debbie Garner

Thank you very, very much.

00:51:35 Debbie Garner

We are going to start wrapping it up up now.

00:51:39 Debbie Garner

Where can people find you in order to to continue the discussion for the you know, for the listeners, tell us where to find.

00:51:47 Debbie Garner

You, on all the socials.

00:51:48 Jessica Hyde

Sure, Twitter is probably the best place to get a hold of me. Ever where I'm at B1N2H3X that's at bin to Hex short for binary to hexadecimal.

00:51:53

Right?

00:52:03 Jessica Hyde

I am on LinkedIn. Hi Jessica L. Somehow I think the alpha but I'm on LinkedIn, Jessica Hyde. I'll come up if you do head Jessica Hyde and you can find me. I'll be at MUS running the ETF this year. Really, really.

## 00:52:22 Jessica Hyde

Excited about that, I've submitted proposals and plan to go to techno security Myrtle Beach. I'll definitely be at the FRWS digital Forensics Research workshop. I'm on the organizing committee for the US and I'll.

00:52:34 Jessica Hyde

Be at all of those.

00:52:36 Jessica Hyde

You can of course reach out at Heck sordia.com and check out our content if it comes up on Cyber 5W.

00:52:45 Debbie Garner

Awesome, thank you so much for being with us today.

00:52:49 Debbie Garner

I have thoroughly enjoyed our talk today to all our listeners.

00:52:55 Debbie Garner

II hope.

00:52:56 Debbie Garner

You have enjoyed this episode of Full access for our next episodes.

00:53:01 Debbie Garner

We are going to be discussing things like mental Wellness.

00:53:05 Debbie Garner

You know women in DFIR, so please continue to join us.

00:53:12 Debbie Garner

You can also follow Wilton and I on Twitter and LinkedIn.

00:53:15 Debbie Garner

My Twitter handle is garner Deb and my LinkedIn is Debbie Garner.

00:53:20 Debbie Garner

I'd love to connect with you and hear your.

00:53:21 Debbie Garner

Feedback on full access Wilton.

00:53:24 Debbie Garner Where can they find you? 00:53:25 Wilton Cleveland I'm on LinkedIn, so just Wilton Cleveland on LinkedIn. 00:53:29 Wilton Cleveland You can find with her. 00:53:29 OK. 00:53:30 Wilton Cleveland I don't have an active well. 00:53:32 Wilton Cleveland I have a Twitter but not not when y'all want to go to. 00:53:35 Wilton Cleveland I mean I'm not very active. 00:53:35 Debbie Garner We're going to get you all. 00:53:37 Wilton Cleveland I know I'm not very active on Twitter. 00:53:37 Debbie Garner Yeah, we're going we're going to change that. 00:53:39 Debbie Garner So also follow Gray shift on all the socials, including Twitter, LinkedIn and Facebook. 00:53:44 Debbie Garner Don't forget to check out our website at Gray shift com, where employment opportunities at Gray shifter posted as well as blog posts, news and other resources, and we hope that you will join us. 00:53:55 Debbie Garner

Next time on full access.