

Chris Herrmann - Beyond the Dots

[00:00:00] Welcome to Analyst Talk with Jason Elders, like Coffee with an Analyst, or it could be Whiskey with an analyst reading a spreadsheet, linking crime events, identifying a series, and getting the latest scoop on association news and training. So please don't beat that analyst and join us as we define the law enforcement analysis profession.

One episode ahead time. Thank you

for joining me. I hope many aspects of your life are progressing. My name is Jason Elder, and today our guest has 19 years of law enforcement analysis experience, some with N Y P D, some with Hempstead, and some with John J College. He earned a PhD studying micro level spatial temporal analysis of crime place and business establishments.

He's here to point out all of your mapping mistakes. Please welcome Dr. Christopher Herman. Chris, how are we?

Very well, Jason. I'm very excited to be here. Thank you so much for inviting me. I really

appreciate you dropping off your card at the I ACA conference and your [00:01:00] visitor's card. You wrote on there recovering N Y P D analyst supervisor, which made me chuckle out loud.

What I saw

it. Well, I think, all of us that either work currently or have worked with law enforcement, right when you get out, there's always kind of that, that interim period of you're not really retired you're, you're not getting paid by the department or the agency anymore, but you're still doing work for them or you're still maybe contributing to some of the work that they're doing.

So I, I feel like I'm, I'm stuck in that ongoing you know, interim analyst. Yeah. Unpaid volunteer helper. Just because I, you know, I have a lot of analysts that I'm still friends with at N Y P D, and then, I've trained a bunch of them as well. Yeah, we maintain those connections, whether it's through LinkedIn or through text or through chat.

You know, there's, there's always something going on every week. It's, it's very interesting. All right. Well, very

good. Well, how did you discover the law enforcement

analysis profession? So, I actually got really interested [00:02:00] in crime mapping, crime analysis, working on an ambulance. So I put myself through undergraduate.

I was a fire science and forensics major at John Jay back in the early nineties back when there was really a lot of crime, not only in New York City, but really around the United States. The, the nineties were a pretty busy time for police departments, but I was working in South Jamaica, Queens, which is kind of like one of the hotspots for crime in New York City still is today.

And I just got exposed to, I mean, I was interested in the medical aspect of working on the ambulance, but I got exposed to so much crime on working on the ambulance, whether it was, you know, shooting victims or assault victims or. Robberies or injured police fire. I kind of got enamored by this, you know, whole crime thing that, you know, I ended up doing my master's and PhD in criminal justice.

Both through John Jay. So did you

initially wanna be an emt?

Is that, what was your Yeah, so initial dream, Oh no, originally my original dream was, was really I come [00:03:00] from a family of firemen actually. So my original dream was to you know, be like an arson investigator or a bomb investigator. I was kind of interested in, in, you know, large fires or even like a, you know, explosions you know, again, bomb bomb stuff.

So most of my undergraduate. Work and studies were really focusing on, on that. But I, again, when I was working on the ambulance, I became so kind of interested in crime that I slowly kind of converted or, you know, I took all of that crime scene kind of experience again, the, the forensics and the fire, fire science and kind of transitioned it to criminal justice.

And then really, and then that's when I was in graduate school. I picked up on mapping and GIS and I, you know, started using Esri products back in the, back in the the late nineties, early two thousands, back when it was art review. And again, I just, you know, once I started actually mapping, that's when a lot of it really started kind of clicking to me, started making sense.

I started seeing patterns, I started kind of understanding things at different levels, let's call it [00:04:00] mm-hmm. . So that's when it kind of became real to me. So, you know, right around 2000. Yeah. I find

it interesting with the ambulance cuz I'm always fascinated with what people did before they were analysts and then, Certainly what they do after being analyst.

That's gotta be a really interesting perspective of what you saw on a nightly daily basis working on an ambulance. What do you think you learned as an working on the ambulance that helped you with analysis

work? So, when you work on the ambulance, obviously you're treating patients right.

Mm-hmm. , so you're really focused on, in this case the victims of crime. You know, sometimes the offenders, you know, who maybe whatever got shot or maybe got beat up or mm-hmm. Tossed in front of the train, whatever. But you're, you're primarily focused on a victim and they're, you know, they're. Not only their, their health, but also their mental, emotional health.

So [00:05:00] I, I think, you know, and that gives you a different perspective really, on crime. Cuz a lot of times I was certainly guilty of this when I was working with the New York City Police Department. You know, a lot of times I'm just looking at dots on the map. Mm-hmm. . you know, every once in a while I would have to remind myself and remind others like, Hey, these aren't just thoughts on a map.

Right? These are victims, these are people, these are you know, there, there's families attached to this, or there's a lot of kind of emotional you know, things that are attached to all of these, you know, crimes because that's what, that's what they are. So I, I think again, with that ambulance experience again, you, you come, come with a different perspective, which is, you know, you know you know, you've known, you've seen, you've heard, you've smelt all the different things that victims have gone through, whether it's in their homes, whether it's on the street, whether it's again, in the subway after the.

After the shooting occurred, whatever the case is you know, you really get to see the, the beginning, middle end of sometimes, you know, this, this victimization process, which again, as an analyst you know, you don't, you don't get exposed to. Also Joel Caplan from Rutgers, you know, the, one of the, one of [00:06:00] the inventors and developers of the Sime product.

He's also an, a former ambulance guy. Turned Oh, I didn't know that. Turned crime analyst turned PhD. Yeah. As well. Yeah. Joel Caplan. Okay. And so when

you're studying graduate level and you're at John Jay, you said you got into mapping and get into geocoding and getting Is, is data. Pretty available at this time for you or you, you scrape at the bottom of the barrel?

No, there was some data available. Again John Jay does have a kind of good working relationships with the, with the New York City Police Department. Mm-hmm. again, that goes back kind of decades. And then the fact that John Jay's a very kind of international college as well.

So there's always kind of projects going on or research going on that typically involves some kind of mapping. And then in the beginning, you know, I was one of the few people at John Jay that really kind of understood mapping and how to do it. So I was getting a lot of requests kind [00:07:00] of to, Oh, can you look at this?

Can you help me map that? You know, can you make this map for me? Which really kinda increased my exposure at John Jay, but then also gave me kind of, you know, interesting experiences working on different types of projects. Okay. And then,

so how did

you make it to N Y P D? So the N Y P D thing was interesting because I was just, you know, I was in the PhD program, I'm working on my dissertation, which which you said is on micro level spatial analysis of crimes and its relation to business types.

And one of the police commissioners at the time was a professor of mine and he heard that, Oh, oh, Herman was working on this and working on that. And then before I knew it, he's like, Hey like I, I got you a job at headquarters. I really want you to take this job. You know, we're gonna pay you.

Like, at the time I'm making like \$23,000 a year, you know, adjuncting at John Jay and kind of being a PhD slave. And he's like, We're gonna pay \$80,000. And, you know, you get to work on your dissertation on [00:08:00] Fridays, and it's a really, you know, kind of great opportunity and I really want you to take it.

So, you know, so before I knew it you know, I'm at head N Y P D headquarters. Which is really kind of one of the best crime mapping or crime analysis kind of labs in the world. I think it's just got so much, you know, there's just such a, a, a, just a expansive infrastructure. And again, you just got hundreds of analysts working on all these different projects.

So there's just great technology and, you know, the real time crime center was started there, you know, we're the, the inventor of CompStat. So we have, you know, decades of kind of great crime data available that, that can be mapped or was mapped already. You know, that goes back to 1993. So yeah, again, it was, it was a great opportunity.

I was happy to make \$60,000 more a year. Mm-hmm. As a, as a PhD student, and again, I got a lot of great experiences and made a lot of great friends and I really enjoyed my time at N Y P D I I, I can't kind of say bad [00:09:00] things about it. So when you were walking

in for the first time to N Y P D, you, it's all college from here.

It's your first police department gig, so to speak. And certainly, you know, your way around mapping, but you're also at the comstat mecca as you said. And so I guess when you think back as your first days walking in, what comes to mind? Is there something that sticks out maybe that's silly now, or, interesting.

It was definitely overwhelming at first, right? Cause if any of you have been to N Y P D headquarters, it's in, you know, it's in downtown Manhattan. It's, it's right by City Hall. It's a pretty, pretty big building. You know, I, I'm only, you know, I'm two floors below the police commissioner's office and I'm kind of working on, you know, I was told I was gonna be working on kind of, Assignments and stuff, you know, for the police commissioner.

So, so yeah, there was a little bit of a, of a high stress, kind of [00:10:00] high pressure you know, is the new kid gonna be able to do it kind of thing. And then I'll be, So the first kind of funny, funny thing that happens when I get to N Y P D is they put me in front of a computer and they're like, All right Chris, we need you to start mapping this out and mapping that out and doing some statistical work on some of these crime control programs that they got going on.

But I noticed that, that like, it's just map info on the computer and then I'm remembering that, oh no, like, I forgot the N Y P D uses map info. Like they're the only ones in the world, I think, or are they only police department in the country that is using MAP info? And I was like, Oh, I'm an Esri guy.

Like, I've been using Esri for a while. I've been drained on Esri. I've been taking all these college classes in Esri. I'm like, I don't really, I don't know how to use map info and number one and number two. I was kind of like very adamant about not learning it. I was kinda like, , I was kinda like, I was kinda like anti map info and I'm like, He's such a better product.

There's no way that I'm even gonna spend time learning this. And my boss was very, like, at the time was very much, [00:11:00] you know, well, you really need to

learn

how to do some of the basics with it. And I'm like, definitely not. Like, just tell me what I need to do. You know, I installed like a student copy that I had on the, on my computer at work and was able to use it for a few months and then I reached out to my local Esri office who I kind of already knew.

And the local New York City Esri people are great and they know me well and they're, they've always been very generous and given me whatever I need. But long story short, you know, N Y P D is now officially an ESRI shop and I don't even know if they have map info on their computers. So I, I always consider myself one of those, like, I was one of the pioneers that was like, you know, like, Hey, you gotta get off the map info, You gotta get onto the Esri platform.

Yeah. Yeah, that's,

It's funny cause when I started there was one guy that championed MAP info and the other championed Azure product, which was Arc View as you mentioned. They came up with names for other IS software. The one said it was Crap info. Yep. Crap info course. And then the other one said it was as [00:12:00] V.

Yeah. So that, but they like, people don't understand that now there used to be a banter back and forth, like it was Coke and Pepsi or something like that. And now it's not even

back in the day, there was a legitimate, I think, competition with Yeah. You know, and again, you know, Esri's been around for decades.

Mm-hmm. . But again, map info. Had a pretty big parent company that was dumping a lot of money into it. And I mean, N Y P D was spending at least half a million dollars on MAP info licenses for, you know, for the longest time. And

I remember like looking at the invoice once and I'm like, like, who even uses this product anymore?

Like, you know, I think we're like throwing away half a million dollars here, which is N ypd. Sadly, that's not a big, big chunk of change, you

know,

like with a, with a six or \$7 billion budget. You know, they don't, they don't really pay attention to that. Yeah. So then

what other projects do you work on during your time here?

So the one thing that I was working on at N Y P D was the Operation [00:13:00] Impact. So it was a crime control and crime prevention program. So it was pretty much they were taking rookies that were just outta the academy. They were putting 'em on foot patrol, and I pretty much had this like mini police force.

I mean, again, a lot of people don't understand how large N Y P D is and how dense New York City is if you've never been there. It's, it's a, it's a, it's a much different place than, you know, almost any other city I've been to. But you need to understand like, like N Y P D is almost 50,000 strong.

You know, we got hundreds of analysts that work there, both civilian and uniform, so there's no like one analysis unit or anything like that. Mm-hmm. , I was working at the, at at headquarters, so I was a part of that kind of centralized analysis unit. But even within headquarters, there was the CompStat unit, which was full of analysts, mostly uniformed.

There was the Office of Management Analysis and Planning or oap. That's where kind of I was, And that was kinda like the research and development kind of area of N Y P D. And [00:14:00] then the chief of department had their own kind of analysis unit and then real time crime center. When that was developed, they had their own analysts.

So there's, you know, a lot of analysts that are working on different projects, but there were a bunch of units that were working on this Operation Impact, which was, you know, we had about 800 rookie cops that we were able to send to different places. So typically, and these places were very kind of small, think like foot patrol, quarter mile area kind of places.

Mm-hmm. . We were able to kind of move these large groups of rookies around to different places throughout the city. And we were pretty much focusing on very kind of current robbery and gun violence. So whenever there was you know, hotspots of robbery or hotspots of gun violence, we would typically take a couple dozen of these rookies and we would send them to the, these different hotspots or different impact zones.

You know, from week to week this would kind of change. So what was interesting about it was, again, we were using that kind of real time data that N Y P D was known for. You know, we were [00:15:00] using kind of the week, the week before data, and then we were putting you know, kind of cops on the dots as they'd like to say.

And then, you know, we were evaluating how much did crime go down or how many arrests were made, or what differences were there. You know, pre sending the cops there and post sending the cops there. So there were, there was a lot of good kind of longitudinal analysis. And again, you really got to see the increases in decreases kind of quickly go up and quickly go down as well.

Once you were kind of moving around these large groups of rookie cops. Okay. So you

mentioned how dense New York City is, and you're dealing with hotspots, and you're also dealing with maps that are two dimensional. So how did you make all that work given, given all those moving parts?

Yeah, so I learned early on, I guess not only doing mapping at John J but also obviously at N Y P D, that really mapping became became a micro level thing, and [00:16:00] the street segment really became the primary kind of unit of analysis.

And you say that it's 2d, but again, I was always working in 3D because man, we have some really tall buildings. Mm-hmm. , a lot of our public housing is, you know, 10 plus floors and you're talking about three or 4,000 people in one building. Yeah. So I was always looking at you know, things in a scene or.

Back in the day, 3D analyst and just really looking at the vertical aspect of some of these crimes hotspots, because again, sometimes the crime hotspot on the street could really be narrowed down to just a couple dots or a couple buildings on the, on the street segment. So I was able to, again, a lot of times just using some of the simple, some, some tools in R G I S or in Excel really kind of get down to the address level.

And then even sometimes to the floor level of a building you know, where these crimes were occurring and reoccurring quite often. Okay. So were you able

to measure the impact of Operation

Impact? [00:17:00] Yeah, so the impact was good because not only did you were you putting cops on Dotts, but then the, the following week you were evaluat.

You know, what was the return on that investment? You know, you, you, you put a dozen cops on this one street segment 12 hours a day for four or five days during that week. They made x amount of arrests. You saw crime go down Y percent. You know, then you had to make a decision. Do we leave those cops there?

Do we move those cops to a new street segment or to a new you know, group of street segments? So, yeah, it was interesting to see, again, all these ebbs and flows of crime, because obviously when we're taking crime, when we're taking police officers away from some of these hotspots and they're getting, and the hotspots are getting colder we take the cops away and then obviously right.

Some of the crime returns there or gets displaced to a, to a different area. So it was, you know, interesting to see again how quickly and how fluid, I guess the process was with crime going down, crime going up. Cops going here, cops going there. Again, it, it was a very dynamic way [00:18:00] of understanding how analysis works.

Okay,

good. And then you also worked on Operation Ceasefire?

Yeah, so that was again, in, during the PhD program. I got to work with David Kennedy, who's one of the founders of the Operation Ceasefire program. Right. Which is a gangs and guns kind of prevention and control program. And I, I really enjoyed that cuz again, it gave me like a nice behind the scenes look at as far as how gangs work and how gangs kind of operate.

And then from the law enforcement aspect of it or from the. Criminal justice policy, cuz we also worked with, with prosecutors as well. You really got to kind of see the the different types of sticks and carrots that they would you know, use against or used for the gang members. So the goal was always trying

to get younger gang members who weren't too involved in the gang or weren't too violent.

The goal was always to try to get those people out of the gang prior to them really [00:19:00] getting, you know, a pretty, you know, a pretty big rap sheet or committing any kind of serious violent crimes. So, you know, there was offers of like free college or job assistance or resume help and you know, mental health, alcohol drug treatment.

So there were all housing you know, free transportation. So there were all these kind of great incentives that they were able to share with again, these kind of low level gang members with the hopes that they would leave the gang. And again, those. Gang members that made that decision to kind of leave the gang and take advantage of some of these incentives, you know, did pretty well.

Almost, almost, you know, 95% of them at the time when we were doing it. You know, were, were getting out of the gang, were staying outta the gang for a year. Were not getting in any kind of further criminal justice problems or trouble. So I thought this was like a, a big success. And it was, again, kind of nice to see how a project like that works from from start to finish.

That is

interesting. Do you have any, [00:20:00] I don't know if there's numbers that you could do, like how many people that you've got to sign up for the program versus number of people that rejected the program didn't take any

Oh, I think program. I would, I would say the majority of people that were offered the program joined the program.

So there was, so again, there were incentives. On one end. And on the other side of it, there were also kind of like almost punishments waiting to happen. Like, Hey, we, we knew that, you know, we know that you were selling drugs, or we have evidence against you for maybe this minor crime or that minor crime, or you're on probation already.

Like, why don't you know your probation officers telling you to do this as well? So why don't you kind of like, help yourself out if you get in trouble again? Or if you violate your probation, right, you're gonna end up in jail, prison for a longer period of time. So again, this is a way out of that, that that slippery slope that you're kind of already going down.

So again, there was a sticks part of it as well. It wasn't just a bunch of carrots that we were giving them. [00:21:00] There was a sticks you know, kind of punishment aspect that that the police and the prosecutors really kind of had typically, again, they, they had some evidence kind of against them that they weren't using yet.

And that's how that was working. Okay, so you eventually

work your way up to supervisor and, and, and you are supervising both sworn and civilian cuz they have both sworn and civilian there at N Y P D, correct?

Correct. Yeah. And most of the units throughout the department, whether it's the precinct based analysis analysts or the borough level?

Yeah, so county level and then obviously the, all the different specialty units typically have their own groups of analysts as well.

Okay. And then are you still with the, the same goal of working on some of these special projects?

Yeah, so really throughout my time at N Y P D, which was only only a few years because once I was kind of getting done with the, you know, the PhD program was also kind of reminding [00:22:00] me, Hey, you have to get done with your PhD, we know got this great job at N Y P D, we know that you're making.

More money than some of the faculty at John Jay now . But, but you have to, you know, the p there is a deadline for a PhD everywhere. . Yeah. So we want, we wanna remind you that you gotta get your PhD done. So eventually I did have to leave N Y P D, but while I was there, I, I worked on just a lot of really interesting projects.

And then again, a lot of them were citywide projects, so it was kind of nice to see again, the size and scope of some of these projects. I remember working on some of the homeland security kind of terrorism projects. You know, trying to find out all the different critical infrastructure throughout the city.

And then trying to find out, you know, do we have Cramers on it? Do we have security guards there, or cops there? Or again, how is this protected or, or safeguarded? So it was kind of interesting to see some of the, I guess, behind the scenes stuff that's you know, again, I was born and raised in New York, but you know, for a lot of.[00:23:00]

A lot of those years, you know, I'm kind of not, not looking at or not even thinking about some of these behind the scenes things that are going on in and around New York City. Yeah.

And I do find that that idea of target hardening certain terrorist targets, that is a fascinating topic.

And I know that there's certain stuff that you can and can't or will and will not talk about, Certainly understand that. But when you think about it and start doing the research and start, start looking at all the different things that could possibly be targets, it's quite a list. It really is.

I mean, yeah, it's a huge list. And you, you know, what was interesting was, and again, this goes back to the, the size and scope of the N Y P D and the, the infrastructure that they had. I mean, I spent a lot of time up in up with aviation in the HE N Y P D head helicopters. I spent a lot of time on the waters with N Y P D Harbor Unit.

So again, you know, you just get to see the, the city from all these different perspectives and all the different [00:24:00] problems. Like, I remember being up, up in the helicopter with aviation unit and we're, we're, we're like looking around different parts of the George Washington Bridge, which is the, the main bridge that you know, separates New York and New Jersey.

And again, you get a five, you know, half a million cars that go over that bridge every day. So it's a pretty important again, part of the nyp, the New York City Transportation system. Again, like, you know, you're looking at this huge bridge and saying like, Okay, what are the different ways that, you know, terrorists can attack this bridge or damage this bridge?

Or, you know, what, what are the different things that can happen? And you're, again, you're, you're meeting with engineers, you're meeting with architects, you're meeting with all these different, you know, maintenance people that work on the bridge daily and, you know, know all the ins and outs of the bridge.

Again, gives you a totally different perspective when you, you know, whenever I cross that bridge now, , I always I'm always like, you know, Oh, there's so much about this bridge that I've learned over the years, but again, only because of my time at N Y P D. Nice. So did you have to

leave N Y [00:25:00] P D in order to finish your

PhD?

Pretty much. I mean, I, they always kept me busy. This promise of, don't worry, you'll be able to work on your PhD while you're, you know, working at N Y P D. Kind of really never never happened like I thought it would. Mm-hmm. So, again, it's obviously a 24 7, 365 operation. It's not like, you know, you can stop this or stop that.

So there was always just a, a, a large volume of work that always needed to be done. I could never really focus on my PhD like I really needed to. So yeah, eventually, you know, kind of push came to shove and the PhD program was really kind of pushing me to finish up my doctoral work, and I wanted to do that.

That was my, my primary goal. And at the same time, bosses change and, and, you know, the job becomes better or worse, you know, some years. And, and it was just, I, I just said it was gonna be time at the end of the year. And I remember my boss laying like, you know, like, like on my last day, he's like, Really?

Like, You're leaving really? And I'm like, [00:26:00] Yeah, like I put my papers in. I told you I was leaving. Like, I don't expect a big party or anything, but like, you know, you, you certainly have known about this. There were a couple people there that were very surprised because they knew I enjoyed my job there.

And I liked doing the work, right? Like the work aspect of it was always very interesting to me. And it still is again, I still work on a lot of New York City crime problems now even as a, as an academic. So so yeah, I, I don't know. I, I feel like right now I have the, the, the benefit of like an academic job, which is the, the same kind of great benefits that you would get and a good salary that I would get at A N Y P D.

But I don't have to work on I don't have to work on Fridays.

Hello, this is Brian Gray and my advice for analyst. Don't settle for mediocrity. If you want to be happy in this career long term, you can't be a minimalist. Just don't do what you're asked for. Do what you know is right and don't ever, [00:27:00] ever substitute quantity for quality. And if you haven't found a way to put design to work for you, you're not doing your best work.

Hi, I'm Jamie Rosh and I have a really important public service announcement for you. No one wants to hear your conversation on speaker phone in a public

restroom. It's awkward for you and for anyone else who comes in. No conversation is that important.

So let's go

talk a little bit about your dissertation then.

Okay. So yeah, my dissertation was it was, I was interested in. So these micro level patterns of crime, So think like hotspots and hot dots. But I was interested in why, why are these certain businesses or business types or even sometimes land uses, why were these specific things?

Such a big contributor to crime in certain neighborhoods. [00:28:00] And I was able to, and again at my study area was the entire county or borough of the Bronx which has always been one of the higher crime counties in the country.

And

I lived in the Bronx for 13 years. So at the time I was kind of living in the northwest part of the Bronx, so it was very convenient for me.

I did the majority of my GIS studies in my master's and also in my doctoral program at CUNY Lehman College, which is like right in the middle of the Bronx. Mm-hmm. . So I just feel like I had, again, all this good kind of Bronx knowledge. I was gonna focus my dissertation on the Bronx, but I was really interesting in, in digging down into these hotspots and finding out what is making this hotspot.

So, Why is this hotspot continuously hot during specific days of the week or different times of day? So I really got kind of fascinated with spatial temporal analysis and micro level mapping. And again, even going so far as to look at specific buildings and look at specific floors, and again, why are these patterns of crime happening [00:29:00] on, you know, specific floors of specific, you know, housing projects or you know, large commercial buildings sometimes.

Yeah. So what were

the

practical takeaways? So the takeaways were obviously that businesses and the, the routine activities. I was really you know, Marcus Felson really poured a lot of energy and, and thought into to this work when I started. I remember going

over to Rutgers again, going over to George Washington Bridge and meeting with Marcus Felson right, who's the originator of the routine activities theory.

Marcus was really obviously again, a genius when it comes to a lot of this stuff. And he was very much like, Okay, you're gonna focus on this and not that. And originally I wanted to do all crime cuz I'm like, Marcus, I got all this great data, property crime plus violent crime. And he says, No, no, no, just focus on this and focus on that.

So he was really good in helping me focus my dissertation on just property types and business types and working on street segments. So that's what my dissertation was all [00:30:00] about. And again, the, the, the role of businesses really shapes the way that people move, whether it's going from work to leisure or work to recreation or recreation to home.

You know, the, the, the way people move as far as transportation, as far as the streets, they take the streets, they walk on the subways or trains that they, that they go home on or go to school on. Like, all those things really matter with all these victimization and offending patterns. Yeah.

What do you think was the most difficult part of earning your PhD?

Oh, well, I, you know, , it's a marathon. It's not a 50 page paper. I think, you know, I mean, my, my PhD is, you know, I always laugh cuz I'm like, you know, my reference section is longer than like the, a lot of the, the papers that my graduate students write now, you know?

Mm-hmm. . So my graduate students will complain, Oh, I gotta write a 20 page paper at the end of the semester. And I'm like, my doctoral reference section was like 35 pages long. I'm like mm-hmm. , you know, so it's, a little intimidating that it has to be original [00:31:00] contribution to the body of knowledge.

Right. So, you need to become the expert in whatever it is your dissertation is gonna be. Mm-hmm. . And then you have obviously much smarter people that are gonna be kind of critiquing it. So there's always that kind of. You know, people that are bigger, better, stronger than me are gonna be looking at this dissertation and, and criticizing it and comment on it.

But, you know, thankfully I had a really good dissertation team, so I felt supported throughout the process and yeah, that, that went really well. Okay. ,

So I don't wanna dissuade any listeners from going and getting their PhD. I just wanna be very clear about that.

I think it's a, I think it's a, a worthwhile investment. I, I think that you learn more in a doctoral program and you certainly do in a, in a graduate program, a typical graduate program. And then it, it really kind of forces you to come up with your own interesting project and then really you know, complete it and, be able to.

Yeah, I mean, in

terms of my graduate, I, I mean, I have a master's in criminal justice, but to me it was just an [00:32:00] extra year of undergrad. That's basically how, what it felt like to me. So it wasn't even nearly the level of what you just described as a PhD.

Yeah. The, the, the coursework is, is very intense that the, that first two years of coursework, you know, just taking classes, it's, it's, it's pretty demanding.

Yeah, so, so I, I don't think that you would get that kind of anywhere else. And then again, just the bar is just set much higher, I think, at doctoral programs, Right. As, as well as it should be. So yeah, there, there's a certain kind of pressure that you have to kind of put on yourself to really kind of do your best work.

You know, I remember when I was going through the graduate program, the master's program at John Jay, where it was kind of like, Hey, as long as I get a B, I finish the program. So, you know, you know, I used to call it my my strive for mediocrity, , you know, it was like, Hey, I'm just, you know, if I get a B is above average, if I get anything, if I get anything more than a B, I'm kind of like wasting my time.

You know, Like I should just be striving for a B and that's, that's all I need to get. But when you get to the PhD program, [00:33:00] you know, your reputation matters. Who you working, who you know, your faculty advisors obviously want, you want respect from them. You want them to appreciate the work that you're doing and the time and energy that you're putting into this.

And it's just a ridiculous amount of work, the, the, the dissertation itself. But but again, it's, it's very rewarding once it's done. And, and I'm, I'm very kind of proud of all those yeah, different doctoral accomplishments along the way. Okay, Good.

And then, so you then take, have a stop in Hempstead pd, which is a suburb of New York

City.

Hempstead's maybe like 10 miles east of the queen's border. So Hempstead is kind of like the hotspot village or community on Long Island in the, in the Nassau County part of Long Island. So there's you know, a couple things that are east of New York City. There's, you know, Brooklyn and Queens are actually a part of Long Island, but then there's Nassau County and Suffolk County.

Both are, you know, suburbs of New York City, like you said. [00:34:00] But Hempstead was like the one community that had a lot of crime had a lot of shootings in homicides compared to every other community on Long Island, pretty much. Or in Nassau County, in Suffolk County, I should really say. So I actually met the chief at the time, Chief of Hempstead.

I meet him working on the operations, ceasefire projects. Obviously there's a lot of gangs going on in and around Hempstead. So I, I get to kind of know some of the Hempstead police people. and then they're, they, they just kind of, it was very informal. Hey Chris, why don't you come and take a look.

Why don't you come to our headquarters and take a look? They had good data, but they had no crime mapping. They had no crime analysis going on. They had a pretty horrible record management system, which I'm sure every every analyst can you know, say good things and bad things about the record management system.

That's a, that's an ongoing you know, funny thing I guess we could all make fun of. But anyway so yeah, I just started doing some real basic mapping for them and got a lot of interesting and good successes. I think in the beginning of that. Just again, the police [00:35:00] identifying trends and temporal trends and just some of the basic hotspots and street segments and I, you know, it became so popular that.

They started to you know, pay me. And then eventually it turned into a full-time job that again, I didn't want. So I was at the time training one of my graduate students on mapping an analysis and I, I kind of offered her the job and, and she's still there today. So it's, I think it's a, it's a great story of police with no analytical unit then like gets an academic guide that, you know, chip in a little

bit of free time and get an analytical unit up and running and then, you know, a graduate student comes and helps.

And I think they might even have more than more staff now than just one full-time analyst. Yeah. What's, what was your graduate students name? Kimber Semen. Yeah, we could probably get her. On the podcast as well. Yeah. Okay. Good. All right. Well, ,

I actually have a new segment now.

As we were talking in the [00:36:00] prep call, you said that you had so many pet peeves that you can't keep it to just one public service announcement. So we can go over all the pet peeves that you have in law enforcement analysis.

Yeah, I'm sure. You know, I, I guess I got a lot of pet peeves about analysis. Then I got a lot of pet peeves about Esri . I got a lot of pet peeves about training. So yeah, there's all kinds of pet peeves that I have. So the, the first r start off with is like why analysts should never put a Z score on a map.

Because it's almost impossible to try to explain or define a Z-score to a group of cops. And then even more difficult to try to explain those Z scores to your police chief or police commissioner, whoever the, whoever the higher ups are in the department. So don't put z scores on a map. You can use the simple yellow, orange, red for crime going up.

You can use the simple light blue to dark blue [00:37:00] for crime going down, but don't ever put you know, z.zero 0 3 5 4. Because a lot of people just won't understand what that is. And we'll only get more confused if you try to explain it to them. Yeah,

well, I've impressed Or even calculating

csc0.

Yeah. Well, you know, it's a, it's a, it's a typical part of the, you know, if you're good, if you're doing good single density, dual density mapping, then you're gonna obviously get some Z scores. So I, I think that's one of the. The primary contributors to you know, cops looking at these maps and saying, What does that actually mean?

And it's, Oh, I'm sorry, I put those E scores on there. Let me try to explain it to you. In simple Crime going up, crime going down kind of terms. The next one

is analysts that put crime counts or numbers on their core PLE maps. So the core PLE maps should typically be regional kind of maps. Mm-hmm.

or you're looking at larger aerial kind of maps. And again, obviously some areas are larger than others. So a lot of times, you know, unless you're controlling for area or [00:38:00] unless you're controlling for population I never feel like looking at a core plus map, there should be any, any crime counts on it or, or, or whole numbers.

Let's, let's put it that way. So I'm a big fan of using denominators. Again, whether that's. Aerial units, crimes per square mile or crimes per linear foot if

you're

looking at streets or if you're looking at population, obviously you write crimes per thousand or crimes per a hundred thousand is the standard that, you know, usually happens when we look at, at crime rates.

My other big one is I, I've moved on. I think, and again, this goes back to my N Y P D experience, I've moved on from hotspots and density areas to just really focusing on streets. So I'm, I'm a big fan of streets as the primary unit of analysis. I think that the police officers understand street segments really well.

I think that right, all the businesses and a lot of the transportation is done on streets, if you look at where the crimes actually happen. So one of the interesting variables that N Y [00:39:00] P D collects is they have a variable. That, that actually exp it's a simple one word, where did the crime happen?

Did it happen at a church? Did it happen on the street? Did it happen at a bar? Did it happen at a movie theater? So it's a very simple description of where did the crime occur? And if you sum up a lot of those violent crimes with the exception of sexual assault you know, streets will typically be the number one area or place mm-hmm.

Lo, you know, specific location where a lot of those crimes occur. So again, I've always been a big fan of focusing on street segments because I think that's where all the, all the action is at. Hmm. Now it's fascinating.

I, when I had Christopher Bruce on the show, you know, he said at one point in time he was worried that analysts were doing too much mapping work, that the big portion of their week was spent.

Either geocoding or you [00:40:00] know, working on maps or creating maps and that he was worried that the profession was just gonna turn into crime mapping. And he says, now he says with Esri's technology and whatnot. And he said, There's a lot of departments that don't even have as licenses. Right? There's coordinates coming in out from the records management system.

So I actually wonder, well, if they don't have mapping programs, does the average analyst even know what the word geo code

is? Yeah, I definitely think. Have seen a swing, right? So I think you're right. I think in the two thousands and even maybe the early 2010s, there's a really big push for mapping.

There's a really big push for understanding s spatial, and then eventually I think temporal s spatial temporal trends become a big thing. But then you saw all the [00:41:00] automation happening, right? You saw like the crime mapping.com and you saw all of these kind of websites that started to pop up.

Or again, record management systems all of a sudden have a mapping tool. So, oh look, the records management management system can map all of our crimes out, or the records management system can show you where the hotspots are. And I think that that kind of took a lot of the, the brain power almost away from a lot of police departments, because again, they were relying on all these automat.

Automated search or automated whatever services to show them where these patterns and trends were, but they didn't really have an analyst to explain it, to break it down, or they didn't have an analyst that was willing to dig down into those hotspots or, or hot streets maybe, and find out what were the, again, specific businesses or properties or locations that were driving you know, crime at this one location or on this one street segment.

So, yeah, I, I do think that, that we've gotten away from the importance of mapping and spatial [00:42:00] patterns of crime to some extent. And again, this, this, I guess this kind of goes towards my rant on training. You know, are we actually training analysts to do what is necessary

you know, when I applied for my job at N Y P D even though I, you know, I had a connection and I was really kind of invited to work there, there was still you know, they put me in front of a computer before I started and they said, you know, here's, here's data on a usb, on a thumb drive. You know, show me this, show me this, show me that, you know, like I had to jump through the hoops.

I had to prove that I could do the work before I got the job. And I think a lot of times analysts come in and, and they're not formally trained problem number one. And then problem number two is the departments are not willing to, to invest that time and energy, or sometimes money into to training their analysts.

You know? So I, I think that there's definitely a break, I guess, in this focus on mapping and spatial pattern analysis to automation where, again, the, the computers doing a lot of the work and [00:43:00] spitting out the maps that. People want, or people think that they want, maybe, I guess.

But again, there's, there's no one that's there driving, I guess the intelligence part of this or the really analytical part of this. And I, I, I think, yeah, that, that's, I think that's the difference nowadays between the departments that are doing well and are kind of innovative and are progressive, I guess, when it comes to some of these things and the, you know, the, the ones that are just kind of doing, again, just doing CompStat, maybe, you know, like CompStat is good enough.

We're, we're getting our numbers, we're producing a couple maps, like that's all we need to do. Again, we're not, we're not really digging down into what the problems are or who are the top 50 offenders in my jurisdiction. You know, I, I think that there's a lot of good things and best practices, I guess.

And I think that's one of the strengths that the ICA has is, is, is sharing those things either, either through their training, webinars or at the conference. Yeah. I'm always surprised

how. Little [00:44:00] training there is on new software, like when you get software for a department and then if, if you get any training at all, it's really just like how to, and it doesn't get into any of the background calculations or best practices, like you talked about Z score before.

I think one of the problems that we have is that there's not any really any calculation on the analyst's part to calculate Z score. They're just clicking a couple buttons on the program and it's spitting out a Z score.

Yeah. Again, I think this is one of the problems of this automation,

I I'll pick on geographically weighted regression. So I, I learned this from the from the forefathers that, that actually created this tool and, and have a different software program. . It's kind of like I learned how to do density mapping using crime Sta mm-hmm. , you know, n i j's crime sta program that was developed by N Levine, [00:45:00] big fan of his.

So yeah, so I, I think again, unless there's that formal training process, unless there's that nuts and bolts understanding of what it is that you're using mm-hmm. , because again, it's, it's very easy to throw a couple shape files into the GWR tool that Esri has built into their software now and come up with a map.

The, the question is, are you gonna be able to again, translate that map properly? And is that map, was that map made properly as far as, you know, the, the statistics and the kind of foundation that's necessary to do a, to do a properly geographically weighted regression. Yeah. I guess other than what

we've already covered, is there something you wish analysts knew about crime mapping?

You know, it would be great if there was some kind of standard, and again, I applaud the, the ICA for having a certification exam and for trying to develop like that baseline set of standards, I guess. Mm-hmm. for the, for the field, because I, I do think that that's necessary, right?

Like every analyst should know a little bit about statistics. They [00:46:00] should know a little bit about criminology. They should know, hopefully a little more about mapping. Cuz I think that that's a big part of the analyst job these days. They should know a little bit about maybe the, the law or, you know, public policy.

So I, I, I think , that broad foundation of knowledge really contributes to you know, the, how, how good an analyst can do their job again having worked on the ambulance, you know, coming from this kind of victim perspective of crime in the. . You know, I, I was always a big fan of telling my analyst to go out in the field and do ridealongs with the cops and spend some time, you know, kind of shoulder to shoulder with the police, talking to a victim of crime, talking to a victim or talking to somebody who had their car stolen or talking to somebody that was in a bar fight or, you know, go to the hospital with the police when they have to interview somebody.

You know, again, it, it gives them a different perspective of what those dots on a map on. Okay. Good. All right,

I'm gonna move on now to [00:47:00] really a very serious subject. I had mentioned to you on the prep call that, I had planned at the I A C A to. Bring some analysts to a college campus there in, in Chicago.

And we had general plans with the University of Illinois, Chicago to have a TED Talk style event . And basically was told by the department chair that we weren't welcome due to their racial strife between police departments and civilians. It kind of threw me off a little bit cuz I didn't expect that to be told that I wasn't welcome on a college campus.

But then I got to talking with other people about it and there seems to be really a movement. By criminologists at universities to change the curriculum and really be anti-police.[00:48:00] , I have no problem obviously, folks being critical of police departments, but we shouldn't be exclusive type of thing.

Like we should be talking these out and trying to come up with best practices. So I, I know you've done some work and have experienced this yourself, having been law enforcement coming in and working at a university. So I wanted to take some time to unpack this a little bit and get your thoughts.

Yeah. So no doubt that there's and again, this kind of just goes towards the concept of bias in general. You know, I was , talking to my students today. I actually in class about it. So again, there are cops that make mistakes. And again, I'll, I'll pick on the George Floyd incident, right?

You got a, a couple cops that make a mistake. You have George Floyd who ends up dead. You have, you know, really worldwide protests as a result of a couple bad cops that make, that make some bad decisions. And you [00:49:00] have a victim that ends up dying you know, in police custody. So, but again, this one incident really kind of tarnished the reputation and a lot of the good kind of , community partnerships that a lot of police departments have put a lot of time and energy in.

So you know, just like it's not fair to you know, categorize groups of people, whether it's age, race, gender, religion, sexual preference, et cetera. I mean, I, unfortunately, I think that's what happens nowadays is people see the co the police or the badge or the, the uniform or the, or the the patch.

They say like, Oh, you're, you're on that team. And it's really become like a, you know, oh, you're a part of the policing profession, or you're a part of that team. I'm on the other team, or I'm on a different team. You know, I'm not against your team, but I'm certainly not a big supporter of your team anymore because of these, you know, you know, high profile kind of incidents where again, cops are doing bad things or, or wrong things.

Yeah. So, I mean, I

guess how do we move forward? I mean, how do we get people at the table if [00:50:00] they're not even willing to

talk? Yeah. It's certainly fractured relationships not only in higher education where, like you said, maybe police departments are no longer allowed to recruit on campus or college students are no longer looking at law enforcement as a, as a good profession or a good job.

You know, I just think that, and then, you know, you run into the operational part of this, which is, you know, police departments are, have fractured relationships sometimes with the communities that they police. So obviously if the citizens that are supposed to be, again, right, contributing and helping to the public safety of the community are not calling 9 1 1 and reporting crime if they're not assisting in investigations either as a witness or as a, I heard some information from someone you know, that really breaks down the relationship with the police in the community.

And then you run into this kind of downwards, you know, you know, slide or downward kind of spiral of, you know, [00:51:00] police then get a little demoralized. Or, Hey, if the community doesn't want to help me solve this crime you know, I don't get paid any more money to solve this crime kind of thing. So you have a, you know, lower clearance rates, you have lower police morale.

You have lower citizen interaction or, or community participation. And I just think it's a very unfortunate and a very negative like I said, downward spiral that can really impact community safety long term. Yeah. It's really up to the police departments, I think, to try to figure out, okay, we gotta figure out a new way, or we gotta try to put a new spin on this, or we gotta try to come up with a new something.

Like N N Y P D has this, you know, neighborhood community officer, you know, they call 'em NCOs, right? Like there's a neighborhood community officer that's attached to every neighborhood now in the, in the city. And this is like their way of saying, Hey, we're gonna put a cop, a couple cops typically in the neighborhood.

And it's only, it's like their job to listen to you. It's their job to hear all the complaints you have, [00:52:00] whether it's about the police department, but it's also their job to get a better understanding of. Crime in this community and you know, again, become net like liaison between police department and and community.

Yeah. And I think

police departments do try. I, I I will say that is they do try, they do , try to come up with new ways to solve old problems. And I do think that most places are fairly open. And one of the things that comes to mind as we're talking is that this idea of like, okay, why are you sending a cop in a mental illness situation?

And it's not like the police department was like, We have to go there, We wanna go there. It's, you know, it's a lot of times. No one else would go, the mental health officials on their side didn't have the [00:53:00] capability or capacity to respond to these calls. So, you know, the only one left is either fire or police.

And, but I've now seen that there are cities that are gearing up to that if it is a mental health situation, that they are trying to send mental healthcare workers to the scene. So it's not just the cops showing

up every time. Yeah, I think the mental health issue has certainly been one of the, the more high profile things that's you know, I guess police have been known for maybe not, not doing as well as they could.

Mm-hmm. . So, you know, part, again, part of that goes back to training. Right. How many hours in the police academy are you know, cadets or rookies getting in mental health training? I think that's one of the, one of the big things. You know, for the longest time it was like, you know, they got 40 hours of training on their firearm and they got, you know, four to eight hours of mental health [00:54:00] training.

So they became really good at shooting their gun and, you know, gun safety kind of stuff. But when it came to dealing with, again, the people with mental illness you know, they really didn't learn or exp you know, learn either learn in the, in the classroom or learn on the job, right. How to deal with those people properly.

So, you know, I think there's a bunch of different issues with regards to mental health calls. You know, the, I think the easy one is to understand, like you said like the, I don't think the police enjoy or appreciate or request to go to any of these calls. You know, these are the calls that can go sideways pretty quickly.

And there's been, again, I, I, I can think of, of specific police officers who have been killed, literally been killed by by EDPs. All because of, again, incidents that started off as not a big deal and then all of a sudden you know, became a pretty big deal. And again, officers lives were lost along the way.

So again it's not that cops want, want to go to these calls, but like you said you know who, who else is gonna go. So if [00:55:00] it is a crazy man with a gun, like the reality is the social worker is also not trained to deal with that problem. Mm-hmm. or the psychologist is not trained to kind of deal with that problem.

Maybe on the phone they are, but they're not trained to deal with the crazy person that's locked them up in their apartment or is holding someone a hostage now, or has their kid's hostage, whatever. With a, with a handgun, I'm like, you know, you know, a lot of people are not trained to tackle that problem.

So I, I love the, the police departments that again, are, are being proactive and, and, and innovative and are partnering with social workers on some of these calls. But like, I, I don't ever see a time, I guess again, if it's a, if it's strictly a medical call person is off their meds, person is in, you know, no threat to anybody.

You know, family is just requesting assistance, you know, by all means, you know, send the social worker, don't send the police there. But the reality is, you know, who, who's gonna protect the social worker, you know, if, if and when things go bad? Because again, sometimes, sometimes they do. I mean, that's just the nature of dealing with mental [00:56:00] health emergency calls is, you know, sometimes they don't go according to plan.

Yeah. So I, I don't ever foresee social workers taking over the job of police officers. Just like I don't ever see police officers taking the job of social workers, you know, I think it's great that there are departments now that are hiring, you know, psychologists and full-time social workers to assist the police, whether it's in training or whether it's actually going on calls and you know, trying to deescalate these problems.

Cuz I think that's, that's a great thing. But again, I, I don't ever see these you know, these two people changing jobs ever. Yeah. Hmm.

Good stuff there. All right, well let's finish up the show with the words to the world. This is where I give the guests the last word. You can promote any idea that you wish.

Christopher, what are your words to the world?

My words to the world will be all about training or education. So get back in the classroom and either get some formal training, whether [00:57:00] that's at your

local college or again, investing some time in the ICA conference and really spending some time at some of the more.

Advanced, let's call it hands on maybe Esri lab kind of stuff. Or again you know, figuring out where the field is going or figuring out the software tools that you would wanna learn, and then trying to figure out new and creative ways to learn that, right? Take advantage of all these great webinars that are out there.

Again, talk to I think this is one of the perks of the ica when they have all the vendor booths, right? Again, find outs. Not only find out about the products, but find out about how you can get trained or how you can learn more about these products. I think that those are all great things that are gonna make you a better analyst, but are also gonna make departments, better departments.

And then again, hopefully we can fix all the problems of the world. .

Very good. Why leave every guest with you giving me just enough to talk bad about you later?

Yeah. I guess we'll leave it at that ,

but

I do

appreciate you being on the [00:58:00] show. Chris. Thank you so much and you be safe.

Absolutely.

Jason, thank you so much for your time. I appreciate the the opportunity to be on the show. Thank you for making

it to the end of another episode of Analyst Talk with Jason Elder. You can show your support by sharing this in other episodes found on our website@www.leapodcasts.com. If you have a topic you would like us to cover or have a suggestion for our next guest, please send us an email@lepodcastsgmail.com.

Till next time, analyst, keep talking.