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SPEAKERS

Matt Hunckler



Matt Hunckler 00:14

We are here tonight because we want to talk about data science. Now I got a couple of statistics here. I'm sure you've read a lot of them in the articles around around the interwebs. But there's going to be about 11.5 million data science jobs created by 2026. According to US Bureau of Labor Statistics 11.5 million according to Glassdoor data scientists make on average \$116,000 per year so I'll be hitting you all up on our next round of funding. I'm super excited because we've got many many amazing diet data scientists and people working in the field. If you work in data science, will you raise your hand don't like they don't want to out themselves, their their talents are in high demand. I'm really, really grateful for all of you to be here to share some of your expertise. And we've got two great partners, two great speakers to be here. But we couldn't have done it without our partners. I want to give a huge shout out to xo tech. So tech, folks, raise your hand, they're in the back, make sure you talk to the xo tech team. They're doing amazing things. And I was having a drink at the bar earlier with one of the leaders there. And he kind of pointed out the fact that you know, you go in to doctor and you say, How much is it gonna cost to have this procedure done? We've all probably been there. I did that with Hank, literally on Monday, how much does this procedure gonna cost? And they all say what? We don't know. As crazy. They are on the bleeding edge of using data science, analytics and big data to be able to predict with better accuracy, how much might that cost? And they're doing amazing things with Walmart health, huge partnership with them. They are brand new headquarters, and they've got an awesome team. So make sure you talk to them after the show. They're awesome. seem to be doing really great things to help all of us with

our healthcare. All right, you ready to bring our first speaker up? All right, let's do it. This person is an expert in data visualization. He's led data projects at Google Twitter, Proofpoint, so many others. He's now at honey, which is recently been acquired by PayPal based in Boulder, Colorado. He used to be a math teacher. So we'll talk about that a little bit. Please help me welcome to the stage data scientist, honey and PayPal. Brian layman certainly are an expert at data science and visualization. And one of the things that I thought was really interesting is just sort of your background coming from being a math teacher. Yeah. How did you find your way to this crazy world of data science and data visualization?



02:51

Yeah, wild story. So I was teaching math for quite a while almost a decade and I was looking for opportunities. I didn't really know exactly where I was going to head. And so what I did was I went to things like this, and I met everybody I could possibly meet, and would have coffee with anybody that would have coffee with me and tell me why they were passionate about what they were doing. And I came into a meeting with a guy that told me his name was Dr. Skippy. And I liked him already, because that's a weird name. And it was interesting. His real name was Scott Hendrickson, but he introduced me to the world of data science through being a mentor. And that, for me was just an amazing opportunity to work with someone that I just really wanted to learn from.



Matt Hunckler 03:35

And did you already have an interest in data science? Did you know what that was? And you're kind of like, I need a mentor? Or how did that actually Oh, it was



03:42

definitely the opposite. It was more his personality was something that I was really attracted to. And his just demeanor was someone that I wanted to learn from. And so I saw this person. And honestly, if he had been a firefighter, I'd probably be a firefighter. I just really wanted to learn from him. And so



Matt Hunckler 03:58

yeah, sounds like Math,



04:00

right, it ended up being data science. And so that's kind of how I tripped into it. I had a math background and it sort of made, you know, our conversation interesting because he was doing things with math that I hadn't done previously, like the application of math that I maybe been looking for, but didn't know. I think you need to have a math background in order to be successful in data science. Good question. I think that you just need to be really curious and and dive into viewing yourself as a problem solver more than anything? Yeah. So the



Matt Hunckler 04:30

that sort of like foray into it? Did Dr. Skippy teach you everything you knew or was more like you just kind of opened a door and you had to walk through it?



04:39

Yeah, the audience here is a bunch of data scientists. I've met several of them and I would say we would probably all define what we do slightly differently. So I still feel today that I am everyday learning something that I don't know how to do. And I think that the comfort we have with being able to dive into opportunities like that is something that is easy to take for granted. If it's a part of your personality, because that can be really terrifying, you know, to be presented with something that you don't know how to do, and it's your job to do it. But that's why data science is really interesting. You know, we all are passionate about learning for the most part. And you know, we're chasing opportunities to get over whatever the next challenge is that's in front of us. So today, I don't sit here thinking I know everything there is to know about data science, I feel like I'm always learning always kind of chipping away at it.



Matt Hunckler 05:24

Yeah, that's an awesome sort of mentality of you mentioned, solving problems. Do you remember what that first problem was? That kind of pushed you over the edge?



05:34

Yeah, I can tell you why I became really interested in data visualization, because it was part of our practice of data science. We were meeting with clients, and one of the things we were doing is we were presenting what I consider to be just absolutely amazing

research. I was on the research team, so maybe I'm biased, but they start up right. Yeah, yeah, I was asking it. And the you know, we were meeting with people that, you know, wanted us to help them solve some of their business cards. Problems with social data. And we were going to these meetings with amazing research. And then we would show them some kind of basic graphs. And they would ask questions about the grass. And I kind of felt like our presentation fell flat a little bit, because we had done this great research. But our presentation maybe wasn't commensurate with the level of research that we had done. And so having the opportunity to think through that, and then we presented one time, an interactive dashboard that we had built, and it answered a question that they had had live, that just snowballed the conversation, where we couldn't snowball conversations with like static slides. And that opened up this door for me that was like, oh, data science as a utility might actually require some kind of visual storytelling skill set. And because we had some success with that opportunity. This startup gave me a runway to start learning d3, which is something I use to build this dashboard and from there just kind of kept going with it.



Matt Hunckler 06:57

Tell me a little bit more about d3. What What did you like about that? And then how did you learn it?



07:02

Yeah. Geez, how did I learn it? So I will say the process to learning it. There's a very steep learning curve. But I honestly I had a bunch of mentors. One of the guys in my life Eric Cunningham had started this meetup in town, which I later started running and was a meetup. It was just a d3 meetup. Yeah, it actually has a really long name. That's kind of silly, but it's it's if you google d3, Boulder, you'll find it. It's still going now. And And anyway, that through that experience, we sort of tackled a bunch of side projects together, that weren't related to work necessarily, but it gave me the freedom to solve a problem with someone that I considered to be an expert. And from there, I took what we were learning back to work and then look for an opportunity to apply it to an actual project. And I think that's really important, like having an arc for your learning allows you to really sink in with You know, the kinds of things that you're thinking about



Matt Hunckler 08:03

when you hit that? I'm sure you hit hurdles or even walls. How did you go about activating that mentor network in a way that allowed you to overcome those obstacles?



08:14

Yeah, I so how did I get into the mentor network was was really attending meetups and and honestly, if you go up to somebody that's passionate about what they do and you're like, Hey, can I please like do something with you, they probably have like 19 things that they want you to help them with. And so, I was basically like, throw whatever you want at me, and I'll give it a shot. So that's kind of, you know, I would just present myself in a way that would be hopefully helpful in the long run. And that was, I guess, how I presented myself as well to Dr. Skippy I was I kind of talked him into giving me an internship. Yeah, that was, you know, so my, my learning has often been like talking people into teaching me hits. Yeah, that's, that's my skill set.



Matt Hunckler 08:57

All right. So it sounds like that's a pretty good skill sets I have so I want to slow it down and maybe break down talking someone in taking you on as a protege. Sure. How does that work for you? How did that work with Dr. Skippy?



09:10

Yeah. Geez, you know, I would say my personality is to hug first. And, and I mean this, like, you know, many, many people in the room that I talked to Tonight, we're in engineering. And when we're in engineering it often there's some kind of like ticketing system like JIRA or something like that. And, you know, you can have this tendency to sort of like view someone as an accomplishment, versus like as a JIRA ticket or something along those lines. And I guess, like, my personality is slightly that I want to really be vulnerable and be honest. And I was a teacher for many years, which gave me the opportunity to stand in front of people like I am tonight. And really, you know, I'm sitting in front of you, you guys are all way smarter than I am and and that's a vulnerable place to be And I want to do that conversationally to is like, be honest with the person that I'm talking to, and let that like drive our conversation into something that might be a project that we could work together. Rather than view them as like, oh, you're my stepping stone to, you know, like getting the knowledge I want to get is like, I look for opportunities to help rather than, like, get and so. Yeah, exactly. So I'm not too good on the impress part.



Matt Hunckler 10:29

That's so true anymore. Man. What you've done is pretty impressive. And I really like that sort of like combination, what you just said the vulnerability, but then also looking to help

for it as opposed to like, what can I get and move a JIRA ticket?



10:43

Yeah, through



Matt Hunckler 10:44

that I really like that sort of philosophy and clearly that led to some really cool things they're doing. That led to a really started as a sales opportunity. Is that right when you're doing data visualization,



10:55

yeah, we were working with clients and I guess that would be with the intent. Cool. The deal. And so one of the early projects that I got to do some data visualization work on, they signed their agreement a little bit faster than some of the other deals. And that wasn't entirely due to data visualization. But that was sort of viewed as a success as part of you know, them signing the agreement a little faster. And so they said, whatever you guys did keep doing it. And that gave me a little bit more freedom to learn data visualization



Matt Hunckler 11:23

at this point where you kind of reading a lot of the white papers that were out there in the sort of academic community.



11:29

That's been a big part of any team I've been on is basically leaning on the expertise of others and leveraging that and in a very, like, you know, simple way. A lot of the work I have done is basically utilized white papers that brilliant people have written and turn that into code. And so I don't know how you guys would define data science, but that's, that's sort of how I view data science for myself is I find something that brilliant scholars have done and Then try to turn it into code and use it.



Matt Hunckler 12:02

Great artists steal. Yeah,



12:03

exactly.



Matt Hunckler 12:04

So good nip is what ultimately got acquired by Twitter. Yes. How did your role change in data visualization at once you're at Twitter,



12:12

you know, really, I had some expansive opportunities at twitter. That was that was a good transition. You know, we were still a data science team that was intact, almost untouched. Very, like honestly, for the first I would say at least year after the transition, our team was at, you know, sort of rolling forward as we were previously, we just weren't selling some of the other data. We were only selling Twitter data. And and so when I had some opportunities at Twitter to do some bigger events, that's when I kind of learned how to build teams a bit more. And I had an opportunity to handpick people across the company, which involves a lot of stakeholder alignment and You know, making sure you get their managers approval and all that. But I got to pick some people across the company to help me build some visualizations for Twitter's largest event. And that event was their yearly, like, kind of like a product display that they did. And so we did a lot of storytelling and how I approached people, as I said, if you could build anything to talk about this product, what would you build? And then I said, Okay, will you build that for me? And so I didn't like approach them with an idea and say, This is what I want you to build. I asked them, and these were people I knew were passionate about data visualization. And so garnering support through that lens was actually a really successful experience for us.



Matt Hunckler 13:41

What makes a good data scientist on a team like speaking from the management perspective, yeah. What are some of the things you look for for a great teammate?



13:51

Yeah, great teammates are, you know, really able to be wearing many hats. I think that's one thing that I like about working you know, smaller teams, smaller companies and startups in particular, is that you can kind of come in and there's so many problems to solve that having the comfort that Oh, today I might be on the sales team or tomorrow I might be on the marketing team, like, sort of having that flexibility to be able to manage multiple roles for yourself is something that I feel like shows a team player, that's something I really look for. Having the ability, you know, to define build test models, you know, and having some sense for like, the nuts and bolts of data science is incredibly important. And then honestly, just like being a good person and really wanting to hone that craft, I think that sounds maybe kind of lame, but honestly chasing opportunities to care about the person that you're with and if their dog is having issues, you know, like honestly sort of commiserating with them over that and I think those those rates are valuable.



Matt Hunckler 15:01

I really like what you're talking about earlier today when we're having lunch about how to approach learning in general. And you kind of have a unique take, I think, probably as a math teacher. Yeah. Bringing that sort of perspective into data science teams. Do you mind sharing a little bit about your sort of paradigm shift learning?



15:22

Yeah, I was a teacher for a long time. And so I got to see quite a few people undertake the challenge of learning math, right? It's it can be absolutely gripping to learn math. And so one of the things that I think is sort of a stepping stone to becoming a mathematician or in some way, becoming comfortable exploring mathematics is getting to a point that you view yourself as a problem solver. And that that removes the opportunity to say, Oh, I just forget what to do. You know, because if you can kind of tinker with ideas Rather than chase like a method, it gives you a lot of freedom. And this was actually for me, pivotal in my career selection. I originally was chasing something called optometry. I was wanted to be an optometrist. And I was taking these science classes. My brother lives in Indianapolis. And he'd probably laugh at this, but I was taking science classes. He's really good at science. And I thought it was so hard because I had to, like, memorize these like chunks of books. And with math for some reason, I felt like I could get the algorithm. And then I could go play with my friends and rock climb. And so I ended up choosing math because I could actually have a social life and then come and on the test, if I knew sort of like the basics of the algorithms or whatever we were studying, I could unfold that in a way that I

couldn't sort of piece things together with science. That's at least how it was for me with like biology. class in particular, I'm talking about



Matt Hunckler 17:01

in a lot of ways, it sounds like you learn the skill of problem solving. Mm hmm. And then you'd learn a tool. Yeah, like an algorithm. So you gain mastery over a tool. But just knowing that you could use that tool to problem solve, and then you kind of go to the next tool, which might be another algorithm.



17:19

Yeah, absolutely. Yeah. And I think the net result for like being part of a community that's really inspirational for people becoming problem solvers, is equipping people to like learn on their own. And that's a big thing with data science. Right now, there's a lot of programs. There's also a lot of free material out there. And there's a lot of people in the community that have projects that they would love some support on. And so I feel like right now we're in this this amazing environment where together you know, a lot of us could learn data science and figure out ways to do it better.



Matt Hunckler 17:52

Absolutely. Yeah. Well, you mentioned tools. I know there's a lot of tools out there from R and Python. Lots of different libraries within In the realm of data science, I know a lot of those tools change for you, as you went to Google got to LA, you talked about a little bit about that transition, not just geographically and company wide, but also with the tools.



18:11

Sure, yeah, one of the big changes that I've noticed in data visualization and data science and practical application is how we can now engage clients. And this I sort of touched on this a little bit when we were talking about doing it. But I had the opportunity to be part of this team that was sort of chasing experiential learning, I guess you'd call it because we were bringing clients in and giving them an experience versus just giving them three bullet points to tell them like this is what we want you to know. And so we The reason that I moved to LA was sort of to build these visual stories that were not set stories, and this is really kind of interesting, I think, is that they were they were experiences so that you could dive into data and leverage the expertise of the people that were in the room versus being

the expert. You know, if you, I know, there are some consultants in the room. And often in consulting, when I've done that, you have to reach out to a client and say, I'm the expert on your subject matter, let me help you. But it's really interesting to leverage their expertise and maybe use them as feature engineers or something along those lines, to bring them in and say, Okay, here's a bunch of data that we can explore in a room together, which is fundamentally different than just saying, Okay, I'm gonna give you these three bullet points that I have, you know, thought about, it's more you're coming up with the bullet points with them. So that's, that's what I was doing out in LA was trying to create these experiences.



Matt Hunckler 19:49

Yeah, that's really cool. Can you talk to me a little bit about what maybe tools you're most excited about right now? exploring data science?



19:57

Yeah, absolutely. Tools I'm most excited about. So I'm still most excited when I'm writing custom visualization. So there are so many libraries right now that you could argue that somewhat unnecessary. But I find at the end of the day, if you are really trying to craft a data story with someone, the iterations that you make on that often can be saved by starting custom, because then you can build anything you want, rather than needing to like, you know, upfront say, Well, this is like 80% if 80% of what you want, okay, with data visualization, there's like so many tools out there you can use, but if you really, you know, want to get to the polished, you know, this is exactly what I had in mind. I feel like you need to start custom. And so, I often push teams to start with d3 to go through the learning curve to figure it out. Because at the end of the day, then you have this like, you know, ability, this skill set on your team to build almost anything you can dream up. That's really cool. Yeah,



Matt Hunckler 20:57

the that sort of approach of Learning a new tool, applying it to new problems. Seems like that's followed you throughout your career. You've also learned to adapt to new cultures, both company cultures, but also city cultures being in Boulder than on La and back in Boulder again. What have you learned about kind of one identifying a culture that's the right fit for you? And then to operating well as a data scientist, and



21:24

then yeah, interesting. So I would say, Man, there are so many great people everywhere. I mean, anywhere you go, like Indianapolis, I've met so many cool people here since I've been here for a short time. I would say I could fit in here I could fit in in LA I feel like I can fit in, you know where I live, hopefully. But I think like, overarching for me is having some ability to work with people that really value learning. And as long as I'm in this like mix with people where we're chasing challenges, were comfortable. Or even if we're uncomfortable, we'll still go into the unknown. But some level of like desiring to get into the unknown is really important to me. And so I gravitate towards people that are generally I don't know, tinkering with some side project. That's often how I meet people. That's how I met you is, you know, through my contact here, oil. And if you guys don't know,



Matt Hunckler 22:23

oil has been a member of our community forever. Yes. And it was my go to Hey, Doyle, who do we need to be bringing into Indianapolis for this talk? Yeah, no hesitation.



22:32

Yeah, he's a great man. But we that's how I connect with people often is we find some kind of like shared passion. And and then we tinker with a project together, or at least talk about it, you know, and so I you can find that in almost any community anywhere. You know, my move back to Boulder was largely just like having this experience of being known and I had been there for so long. And I've been tried for years, both my parents are here tonight, which is pretty fun. But I've tried for years to get both of them to move to Colorado. And they've both repeatedly told me but Ohio is home. And I now kind of understand that, like, I left my home boulder and went to LA and I really needed to be back home, you know. And so so now I'm like, glad to be back with the people that I know and love.



Matt Hunckler 23:25

Well, and real quick, what what are you excited about with honey and PayPal?



23:29

Oh, so much. When this company was pitched to me, they just had their leadership I am so

excited about. They told me on one of my first days that one of their goals is to try to give every family in the US \$1,000 and that part of the vision for their company is chasing that opportunity to fulfill that vision and they have a lot of ideas on how we could do that. But those are the kinds of things that I want to be part of. So I'm really glad to be contributing. Are the data science team I'm on is exploring some pretty cool projects. One of the projects I'm working on is, is to deal with, you know, like, lending and how can we lend more fairly and thinking about those kinds of things I just love and so, yeah, there's a lot of opportunity. We just were acquired, you know, by PayPal. And so that's still in the works. But yeah, it's it's really interesting to see how all this shakes out. And by in the works. I mean, we're figuring out what's happening.



24:30

It's it's done that actually, yes, yeah, you can tweet that out as well. Yeah.



Matt Hunckler 24:36

Well, Brian, I really appreciate you being here and plugging in here with the power kit community. I want to my last question for you is how can this podcast community help you?



24:45

Oh,



Matt Hunckler 24:46

wow. If you have a personal professional, any kind of opportunity or problem or thing you're curious about Wow,



24:53

I get to ask all of you for help. That's amazing. Yeah, you know, guys i what i would love is As I would love for you to hit me up with side project opportunities, like honestly, if there's something that you feel like you want to learn or something that you're thinking about for data science, like, reach out to me, and I'll do my best to give you guidance, and the best way to reach out to me is probably DM me on Twitter. Do people still use Twitter? Because I



25:19

still use it? Yeah. So if you guys, you guys still use that. That's, that's the best way to hit me up. So



25:26

yeah, and I would say within that context, I really enjoy when people are curious about data science, and so anything I can do to inspire that will be really fun.



Matt Hunckler 25:38

Brian, I really appreciate you being here. Yeah. Can we give a huge round of applause to Brian Lehmann for being here?