

Transcript

Derek Bruff: [0:00] I'm Derek Bruff. Five-years ago, I pitched the idea of a podcast about educational technology to a group of colleagues here at Vanderbilt. I had been thinking about this idea for awhile. The idea of interviewing faculty and others at Vanderbilt and elsewhere who were using technology in creative and effective ways to enhance student learning. But I wasn't sure how I could produce such a podcast by myself. Fortunately, my pitch was warmly received by my colleagues and a few months of planning and preparing and interviewing. Later, leading lines was born. We posted our first episode, an interview with George Siemens back in July 2016. If you pull up that episode page on the leading lines website, you'll see we labeled the first episode with a 000 001 for an episode number. I remember thinking that we might hit triple digit sometime far in the future. So we might as well use a file naming convention we can stick with for awhile. I was a little skeptical. We would actually reach Episode 100, but what do you know here we are five years later. I would like to use this odometer significant episode to acknowledge all the mini Vanderbilt colleagues who have helped make leading lines possible. First, thank you to Rhett McDaniel, Assistant Director for digital media at the Vanderbilt Center for Teaching, and our longtime Podcast editor. There's no way that leading lines would exist without Rhett's hard work. And we certainly wouldn't sound this good without his expertise. Second, thanks to John Sloop, one of our original producers, who was at the time Vanderbilt's Associate Provost for Digital Learning. John had also been thinking about making a podcast. It's part of his work. So, when I threw the idea out, he was immediately 100% supportive. I have found that John Sloop is always 100% at whatever he does. And I'm grateful for all the energy he brought to the team and our early years. Thanks also to all the producers we've had over the years. Cliff Anderson and Melissa Mallon from the Vanderbilt libraries. Stacy Johnson, Julaine Fowlin from the Center for Teaching and Gayathri Narasimham RSEM him and only move a from the Vanderbilt Institute for Digital Learning. Their efforts to find an interview fascinating guests doing interesting work in educational technology has enabled the big tent approach we take to the topic here on leading lines. And thanks to our guest interviewers, Alex Ochsner, Paula Andrade, Derek price, and Thayer Walmsley who brought us great guests we wouldn't have

featured, otherwise. I'm also extraordinarily grateful to all of our listeners, both new and old. Leading lines would be a productive experiment for us even if we didn't have listeners, since it gives us an excuse to reach out to people and learn about the great work they're doing in educational technology. But knowing there are hundreds of you out there who listen and even listened regularly. Well, it's an honor to produce a podcast you find useful. As for the future of leading lines were planning to keep interviewing interesting people and sharing those interviews here on the podcast. The pandemic certainly threw off our production schedule, perhaps permanently, but our current team of producers, including Cliff and Melissa and Julaine, are really excited about upcoming episodes. Speaking of episodes, this one, episode 100 is not just a bunch of thank you.

I reached out to Zoe LeBlanc, a Vanderbilt doctoral student. We interviewed way back in our first season in episode 8 to see if she would come back on the podcast to talk about her career since that interview in 2016. Since finishing at Vanderbilt, Zoe has been a digital humanities developer at the scholars lab at the University of Virginia and a postdoctoral associate and weld Fellow at the Center for Digital Humanities at Princeton University. This fall, she has started an assistant professor position in the School of Information Sciences at the University of Illinois at Urbana-Champaign. It's been a joy to watch her career developed from afar. And it was a joy to sit down with her virtually to catch up and talk about that career. Without further introduction. Here is my conversation with Zoe LeBlanc. Zoe you, It's great to have you back on the podcast after a few years. Welcome.

Zoe LeBlanc: [4:30] Thank you. It's great to be to be back. It's been too long. **Derek:** [4:34] Yeah. You were in, I think our first season of episodes several years ago when you were a graduate student here at Vanderbilt, and you gone on and done some things since then. And tell us where you are right now. **Zoe:** [4:46] Yeah, I'm actually closer than I've been to Nashville in some time. I just moved the summer to Urbana-Champaign, where I'm currently studying as an assistant professor in the School of Information Sciences at the University of Illinois. So truly I've wandered a field a bit and now I feel like I'm actually closer to Vanderbilt than I can in some time. So this is really a lovely yeah. **Derek:** [5:10] Yeah, That's great.

Let me start by rewinding though and asking you about your dissertation here at Vanderbilt. And I saw on your website that you described your dissertation as the first digital history dissertation at Vanderbilt. Who and so what do you mean by digital history dissertation? And what did it take to complete and defend one of those at Vanderbilt? **Zoe:** [5:35] Yeah, that's a great question. I actually, with a series of friends/colleagues, have an

upcoming chapter about this very question in the forthcoming debates and digital humanities. It's all about digital history dissertations. So, I could say just wait for it to come off the presses. But this is a great kind of question for me to start off with, because what I had hoped to do with the dissertation and what ended up a final product were a bit different. It is not a totally born digital web-based dissertation, which is what I had hoped for, but didn't work out in the end for a few different reasons. Part of it was time. Since we talked, I actually went back and listen to that episode to find out kind of where in that moment and so many things have happened since then I I had graduated from the Nashville software School Boot Camp. I ended up working as a digital humanities developer and that was all while I was finishing up. So, time became a fairly scarce resource, but it was mostly also just it wasn't something that was totally I'm feasible at the history department at the time, but I did do a lot of digital. So, the digital aspect ended up being an entire web application that I built from scratch that you can find on GitHub. I wouldn't necessarily recommend using it without talking to me first, but it lets you take kind of any sort of archival image and extract data from it. So, both images and text, which back in 2016, 2017, was still really hard to do since then, there's been a lot of solutions that have come out. I wouldn't necessarily do that work that I did them, but that was one big component. And then the other piece was that I actually did quite a bit of machine learning in the dissertation itself. So, there was a lot of grass, probably more than anyone out by committee signed up for. But in the end, they even hands-off or more graphs. So I feel very vindicated in the end. But yeah, so that was the two main kind of digital components. And I still feel very strongly that both of those are digital history because shaped the narratives, they shaped the interpretation. I worked very, very hard to make sure that they weren't just kind of sidelined and we're actually integrated into the dissertation as a whole. So two of the chapters actually walks through kind of building up to a machine learning kind of comparison between different kinds of publications produce both in Egypt and other third world pubs to kind of look at discloses in the 1960s around the third world, which is now become the basis of hopefully my digital book project that's I'm hoping to produce here so that, that's what happened with the dissertation. It was actually a really great experience defending it. I think There's a lot of anxiety, desert heating regardless. And then when you added the digital component, it can feel particularly like you're out at sea with no clear direction and no horizon and just kind of getting crashed constantly. But in the end, I thought my committee were very generous but also willing to engage with it. And in the end, I was yeah, really throat that I did it even though pretty much nobody told me I should.

Derek: [9:02] Yeah. Did you have how did you go about the mentoring that you needed for the digital methods using? Did you were able to find that in the video about history faculty or did you have to go outside of that faculty? **Zoe: [9:16]** I had to go outside. I mean, things are changing. I know actually my friend and former roommate is teaching the first digital history course right now in the History Department, Daniel Jenkins. So, I know things are changing, but back then there was not really anyone that did that kind of computational work in the History Department. They had a few people that were more kind of spatial history type self. But I did have mickey picks up at the Vanderbilt dij who was on the committee and she was extremely supportive. Then it was really outside Vanderbilt in the dij community at the time. It was still kind of early in the days of doing machine learning with text analysis, a lot of people were still doing what I guess is Machine Learning, but it's generally kind of more seen as unsupervised learning, which is topic modeling. That was still kind of pretty hot. And so I, I tried it. It could come for the life of me, feel like I could base and interpretation alphabet. And so I kept kind of delving deeper into text analysis and then reaching out to people on Twitter. Some of whom are now my colleagues like Ted Underwood here at Illinois. And they were very, very And so that's how I started kind of digging into regression models as being kind of an alternative for doing this work. But yeah, a lot of trial and error, like I can't stress that enough. My first, I didn't actually start with topic modeling. I started with a word embeddings. And this is back before, are kind of large language model Iran. And yeah, it was just, it was not, it would not be the place I would recommend most people start their first text analysis project, but I learned a lot and that's that's an important part, I suppose. **Derek: [11:07]** Well, you know, stuff like you had to build some tools to to to analyze the text that you're looking at, have some presence.

Zoe: [11:15] Absolutely. Yeah, yeah. I mean, it was wild. How much working with materials in copyright still really made it difficult for me to even just compare it to other DH projects because so many of them, especially in North America, work with pre 1923 data. Yeah, exactly makes sense, or I guess 1924, I should say now we're slowly inching to the horizon of the present, I guess. But yeah, no, it's so it was definitely much more challenging than I ever anticipated when I said it. **Derek: [11:52]** Yeah. Well, and you mentioned what's next for this work. I you know, I'm guessing it's not a traditional monograph. **Zoe [12:01]** Yeah. Although again, nobody's telling me to publish as a digital book. So, I feel like I just keep kind of banging my head against walls that somehow it works out. But no, I, I feel very strongly that you do. This work leverages a lot of data and also is a way of doing kind of interactive scholarship in a way that we haven't been able to do until recently. And so I'm really, really

passionate about trying to tell the story in a way that doesn't hermetically seal those two off, right? I don't want this, you know, static graph. And the, nothing wrong with static graphs. They can be incredibly compelling, right? It's more that I want people to understand all the interpretive choices second limb, and I think that's where interaction becomes enormously useful. Yeah, yeah, so that's, that's the goal. I'm still working on my book proposal currently still needing to talk to publishers. So all this could change, I suppose, but I, I really excited for it. **Derek: [13:05]** Yeah. Um, well, and I guess you have to find a publisher who's willing to new and different format. **Zoe: [13:12]** Yeah. Yeah, yeah. Which people have been starting to do? I mean I'm not by no means the first year, but yeah, you know, it is it is a lot of work and it's a lot of having to build custom infrastructure. But I guess I like that at this point, I think.

Derek: [13:32] Yeah. Well, tell us a little bit about the next step. So you said you started doing THE development while you're finishing your dissertation and that was at the University of Virginia. Right? So, tell us about that position and what kind of work you did there. **Zoe: [13:47]** Yeah, that was phenomenal position. I love the scholar's lab. Great, great people there it was, it was kind of a wild, just lucked out. I'd finish NSS and well- **Derek: [14:03]** Nashville software school. **Zoe: [14:04]** The Nashville software school, I feel like I'm promoting them unintentionally. This podcast is now sponsoring. But again, it was wonderful and I actually, in between that and going to UVA, worked very, very briefly part-time at a healthcare startup in Nashville because I wanted to keep learning. And it was one of the few places and they reached out to me. I realized pretty quickly I wanted to stay in the humanities and I wanted to finish my dissertation to things that seemed incredibly unlikely working full-time. And so the scholars lab position came up and it was just kind of a perfect fit. They have obviously been in the DH game for a long time. In fact, they're one of like multiple DH centers on campus, which is kind of a wild experience. While I was there, I worked on a few different projects. I worked a bit on rebuilding neat line, which is their candidates premier web application for kind of deep mapping that got kind of built, I think originally in 2011, 2012. And so trying to rebuild that kinda from the stats up, pretty much it an entirely new code base, which was a lot of fun but also challenging. I also worked a bit on a collaboration between Hathi Trust cheese store in portico, which didn't actually, I think end up getting off the ground for. Reasons, although some of the good through j stores new text and data mining tool constantly, which you can find online. So I worked a little bit on that very, very little. And then I actually did a lot of teaching with you. Yeah, which is part of how I ended up on this path I'm currently on. So I actually EPA scholars that they have the Praxis

Fellows Program, which I'm not sure if people are familiar with, but it's been running for quite some time. And it essentially takes together a cohort and six to eight graduate students and have them work collaboratively on a digital project. And it's produced some really cool projects in the past. Prison, which is this like a text annotating tool that is apparently wildly popular in K through 12 circles was built by a set of graduate students, right? Right. And yeah, my first year there, I just kind of consulted and helped a little bit, but I became really passionate about helping the students get a better granting and programming. And so myself and one of the other senior developers, they're actually started something called Code Lab, which is now running each year, which is essentially a semester long, kind of deep dive into the foundations of programming. And that was a kind of aha moment for me because I realize I really, really love teaching and I really love my research. And so it was like as much as I love working on these projects and the scholars slab is amazing. They have a ton of resources. Like, you know, it's a team of like 13 staff which is pretty big for adults center.

Derek: [17:06] No kidding.

Zoe: [17:07] And they do everything from makerspace to data analysis like they do at all. So it was a ton of fun. But I, I realized they kept trying to turn my job essentially into a lake at teaching, research job and it was like okay, and they were very supportive when I decided to kind of focus on my dissertation, prove it, and decide to go on the academic job market. But it was a lot of fun and it was hard to leave actually people, yeah, I realize a pretty charged conversation talking about the academic job market, but I really did love it and highly, highly recommend that track. There are not many DH developers out there and there's a lot of people looking for them, So. **Derek: [17:52]** Okay. Sounds good. So it sounds like you kind of had a fork in the road there WHO and one path was something that looked a bit more like a faculty for the FM, right? Teaching in scholarship research. And the other was a developer position, which will be kind of staff coder, programmer. And that sounds like there's a real path there, right? Like there, there are job opportunities. **Zoe: [18:16]** Absolutely, Absolutely. It truly, in some ways the path of least resistance will stain on that each developer kind of path. And I have a lot of friends in that world. Now it's starting to kind of coalesce into a real research community. There's in fact a DH tech group, which is kind of a group of research software engineers. So, for people that are interested, they have a Slack team now they're starting to organize conferences and stuff. So, it's a real kind of vibrant community that's coming together. But I just realize as much as I love coding and collaborating on projects. I kept trying to spend all my time teaching. I was doing dozens of consultations and planning this course out and just getting really passionate about that. And, you know, I, I felt

like my experience is that NSS, well, I loved them, was also not maybe the most sustainable for this field as a whole, it would be great if people could learn to code within the scope of their program. And so that's what I'm really trying to do here at the high school. And in fact, did that at Princeton as well a bit, which was super seven.

Derek: [19:24] Well, tell me about the Princeton postdoc there. Yeah. What did that look like? **Zoe:** [19:26] Truly that Derek, I cannot stress this enough. I keep just tripping and somehow land these like super wonderful positions? I mean, I don't want to sell myself short. I work at it. I do try and I do care. But you can never predict that something like this is going to come about. And the Princeton posts up with just a dream. Obviously, you know, lyy's are great, but specifically the center, they're just really, really passionate people, really, really smart. I'm not crazy. Workloads even though it's academia, like really kind of carrying about community building and all these kind of things. So that was lovely. And then also just a ton of support for what I was interested in doing. So I actually got to teach an undergraduate intro to the each core switch my students described as a first year intro to CS in Python and Seminar Discussion all in one course, which I think they liked it. I mean, the reviews were pretty positive but I thought that was like, whoa, I guess it was a lot. But it was just me know, at the time, apparently the only Python course at Princeton. So, the students are extremely excited. They got to kind of learn Python and actually do really cool, you know, not fully polished projects, but still really exciting sets. Things looking at like the history or the principal radio station playlists and comparing the effective like streaming on kind of homogenizing DJ kind of tastes in terms of what they're kind of plane on this radio, which like a first-year history freshmen getting to do a project like that. Yeah, python and doing kind of web scraping is really exciting. And then I also got to co-teach in the computer science department as well, actually with Brian Kernighan, who I'm not sure if you know, but is probably kind of a living legend. He's one of the creators of Unix, you know? And just happens to have a passion for digital humanities. And so he's been running this independent seminar called building the tools. So he invited me to come co-teach it for the last two years. And it's just a ton of fun because it's the students that are fairly events and just spend the whole semester kind of building a DH project, whatever they come up with. And the gamut, which is so impressive, I need I, I really can't. I was just like, wow, okay. We definitely have a need that students are interested in doing this. We need to figure out how to type is more to the humanities side for sure. But really just super, super exciting. I'm trying to think of some of the projects that I could share. This past year. I had a student interested in the impact of baseball, kind of read it, discussions and trying to like correlate that

with essentially what was actually happening in the games and found some really interesting, essentially like counter intuitive things about kind of baseball analytics and just what fans actually engage with versus what necessarily chains higher for it, which is something I would never particularly liked, know much about. But they did this really phenomenal deep dive. I've had students went with- . **Derek: [22:47]** And what level of student were these?

Zoe: [22:49] These were juniors or third years. Right. **Derek: [22:54]** Okay. Undergraduates.

Zoe: [22:56] All undergraduates. Yeah. I think it was all juniors. I also advise to few senior theses as well, which was really fun as well. One, doing this kind of phenomenal work on OCR quality and kind of assess mid and kind of DH, existing datasets and also comparing OCR, commercially available OCR APIs, which I haven't actually seen many scholars do. He took these snapshots over time. And actually, I don't want to get anybody in trouble, but found that there was a lot of branding for some of them in terms of rape releases, but not a lot of change on the actual OCR quality underlying models. Yeah. Which is super interesting, brings up all sorts of questions. But yeah, so it was really, really a great spot to be teaching. **Derek: [23:45]** And just for our listeners, the ICR is Optical Character Recognition. **Zoe: [23:50]** Yes. **Derek: [23:52]** I am taking that image of text and reading the texts that they are an- **Zoe: [23:55]** Absolutely. Now when you upload an image or a PDF to Google Drive and it automatically kind of you can search the text that's OCR running under the hood. An API is these kind of services that Google and Microsoft and Amazon all release where you can pay to kind of use that model on your own sources without having to go through google Drive interface. And so, lots of programming to use those. But yeah, it was interesting this unit had about a terabyte of data by the end. **Derek: [24:29]** Wow. **Zoe: [24:30]** Yeah, truly big data, at least for the Humanities. **Derek: [24:33]** Yeah, yeah, absolutely. So that the Princeton position was a postdoc with teaching and scholarly Yup. Components, it sounds like. And that has led you to Illinois? **Zoe: [24:49]** Yeah.

Derek: [24:51] And now you're in a faculty position. And so, I guess my question is, in what ways is your new job like a typical faculty position and in what ways is it different? **Zoe: [25:01]** Yeah, that's a great question. Well, it's definitely, it feels different being in school of Information Sciences coming from his free. Although there are historians of information in the school and there are also fabulous his lines at Illinois. So, everybody's been very welcoming. This semester I'm teaching the graduate introduction to digital humanities, which is perfect for me, you know, super exciting. And in some ways, it's an interesting kind

of cohort of students in a way that I think is probably different than most other places because we have a lot of students getting their master's in library and Information Sciences. Some, you know, aren't necessarily interested on the kind of coding building side but are interested on more of the theory side. Although some of them have really kind of done a lot of data science work because they're interested in working as data librarians. And then we also have PhD students in the School of Information Science and some of whom have been professional programmers for years. So, it's just kind of the totally wide range, which is super exciting because the projects, they're all doing kind of similar kind of individual projects are all very, very kind of interesting and deep dives. But I've organized the course around data this semester and it's been a lot of fun to kind of think of data. Indeed, just this kind of organizing principle. But that's still pretty kind of similar to Princeton. I think the, the big differences in terms of my kind of research here is that everything I do is really kind of, it counts in a way that I think was going to be more of a struggle and a lot of history departments. So, I currently work on the programming historians editorial board, but also as the technical lead. So actually, rebuild the journals infrastructure. And I'm currently kind of undertaking a big rebuild of that. And that's something that, you know, the history department that I think would be very supportable, but struggle to kind of take seriously a scholarship. Whereas here in the high school there's lots of people that do that kind of work. There's computer scientist, it's people that specialize in databases. There's data visualization people. There's people that, yeah, just all work at this intersection of kind of, you know, theories of information, but also information management and practices and all these kind of things. So, it's very exciting from that spot for me and also having other DHI, colleagues in the school is also really nice because, you know, a lot of times places are hiring a deed. Person, which is phenomenon like, again, can't stress it enough. It's a total lottery crapshoot out there. But it's often the one, right? It's, it's rarely kind of a collective group. And so that's been phenomenal as well. And so, yeah, I just feel very, very lucky and still kind of in shock. Keep pinching myself. But yeah, so that's primarily kind of the big shift. And also, just kind of shifting to Professor 2, which is in of itself. You don't realize how much people are waiting for you to get to that level, to reach out for grants and all this kind of exciting opportunities. But things where I'm like my search hasn't changed. What's changed? Like Why isn't anybody telling me now? And I think it's, you know, that kind of level of seniority. I put quotation marks there, mechanical air quotes. You can't see it, but I will say. But yeah, that's been a big shift as well. **Derek: [28:35]** Yeah. Yeah. So, hold on. I had a question and then I just lost it. Well, off the one I have plan then. So oh, yeah, that's it. So, in terms of like looking ahead at Illinois and advance in your career

there on the faculty track. So maybe say more about kind of what the, what the research and scholarship is going to look like for you.

Zoe: [29:08] Absolutely! **Derek:** [29:10] Can head to promotion, reappointment, that kind of thing. **Zoe:** [20:12] Yeah. And for all the listeners, I just cross my fingers as Derek said my future kind of career. So that was the laugh. Yeah. So obviously my digital book project is kind of my main focus. I'm also co-writing a book on the concept of data work in the humanities, which is really kind of interesting, sociological kind of historical recovery project looking at how people talk about data and the humanities. Why do most people say they want to build an archive when they mean a dataset, these kind of perennial questions and just kind of trying to historicize kind of our current data moment a little bit. So that's those are my two main projects currently long-term here. I'm very, very interested in kind of the intersection of histories of information. And also kind of thinking about decolonization, kind of social justice and equity and access and sustainability. Especially both kind of struggles in the past, but also our new horizon. And so I'm trying to kind of work together with other scholars interested in those questions, both from a historical sense. So people interested in looking at this history of why that third world energy around the new world information and communication order did substantially reorder the International Information order and the way we kind of knew it now, why is it that we have so little international governance around kind of things like data and platforms and all these kind of questions. But also thinking about the kind of tools we as humanists rely on. What sort of kind of economies of data are we kind of buying into? I think we're in for not a horrible kind of horizon. I mean, obviously, you can get pretty dark these days, but I think it's a bumpy road with the kind of consolidation of library services and kind of who owns collections and who has access to them. I think it's very exciting that a lot of library content providers are creating their own texts in data mining platforms, but I also see that potentially becoming a friction point in the future. And so I'm very interested in these kind of questions and trying to think of ways to kind of sustainably build tools. I worked on a tool this past year with a friend and colleague, John Lad, who's currently at Denison, where we rebuilt his network analysis tool, which is really intended for people just starting off, it's not going to necessarily make the most kind of. Groundbreaking research analysis, but it's really to kind of encourage people to do this in a way that we felt was both sustainable and also actually taught the fundamentals. So we've rebuilt his who called Network Navigator. And it really emphasizes both kind of different modalities of doing network analysis visualizations, which is that the issue and DHA, because everyone loves force, force layout,

atlas, which is interesting but also oftentimes kind of meaningless and so it gets overinterpreted. So we tried to build in more visualizations. And then it also encourage people to work with the actual network metrics themselves, which we tend to find, people tend to gloss over. But that's actually the more meaningful part, not the visualization, although of course in the humanities, information design is important also. So we're not trying to say it's not, but I'm trying to empower people. So those kind of projects really, really excite me and I'm hoping to kind of support them more in the future. Actually organized with John panel, the summary at the Association for computers and the humanities conference called user-friendly The future of digital humanities tools. And it was probably one of the most fun I've ever had on an academic kind of panel. It wishes people the invited a lot of people that have been doing this work for some time. People working on some of the Stanford tools, some of the scholar lab tools, NYU, Columbia, few, few different DH clusters and people had a lot of thoughts and a lot of strong feelings about the future of this type of DH research and D each resource. And so that was super exciting and something I hope to work on some more on. Then the final thing I'm going on too long, but it's such a good question. I'm really, really passionate about thinking about how we teach coding to humanness. And so one of the things I've realized is that I had felt like such an outlier with my MSS background, but it had actually given me a pretty strong foundation in carrying. Most people, I've realized tend to learn by either teaching themselves are kind of a, a much more kind of slap dash combination of resources. And the problem is, is that's who's teaching the next generation of kind of coders, right? And so we don't really have great pedagogy when it comes to teaching this stuff. We don't even know right-click. And as far as I know, there's not really been conversations about this. There was a handful of articles back in the 20 tens about this, but it's still kind of under theorized, you know? And so I'm really hoping to kind of bring people together around that I'm trying to currently organize a workshop that will hopefully turn into something a bit more useful, you know. But yeah, that that really struck me is just, you know, we you have no idea. No idea, but like, you know, everybody's kind of reinventing the wheel, I think. And there's ways in which I think we could collectively learn from one another and also add a bit more coherence so that not everybody has to have such an uphill battle to learn these things.

Derek: [35:13] Yeah, well, I'm reminded with my faculty development had on that a lot of us teach as we were taught. That's kind of our default, default mode until we- **Zoe:** [35:22] Absolutely. **Derek:** [35:22] To see what other models there are out there and see what the literature might point us towards. But if, if you were self-taught, that's what's been really bad

starting point, right? **Zoe: [35:31]** Right. Absolutely. It's funny at the scholars like me and the senior developer Shane there, when we were developing this course, there had what amounted to a one day long fight, which it was an open kind of kind of like the CFT, like you could hear people. And I think we scarred all our colleagues just kept going back and forth over what was the amount of depth students to know, to feel comfortable. Because the problem is, in DH, we have a lot of these great one week summer workshops. In fact, I taught some the summer. So really I think they're great. I'm not trying to and that's how I got my start. But they also aren't sufficient to get some more comfortable enough. And so we were really trying to kind of think what is enough so that somebody could then feel comfortable go into Stack Overflow, Google link these things, not feeling like they're the problem, but realizing it's the computer, which is always the case, It's the computer's fault, not yours. And so we were really kind of arguing about that for a full day and yeah, just realized probably other people have thoughts about that, but it was just I can say what it was. It was about whether you need to teach classes in Python, which is this kind of data structure that is a little more complex. So it tends to get skipped over in a lot of kind of introductory things. But if you skip over it, you don't necessarily understand how a lot of Python libraries work. And so becomes a question of how much hand-waving it's okay. And how much is, you know, Oh, this is just kind of kicking the can down the road in a way that's not helpful. **Derek: [37:09]** Yeah. Yeah. Well, and so I had another question plan that I think you may be the perfect person to ask because it touches on this issue of teaching humanists. How did you coding and programming. But it also gets it this kind of fork in the road that you faced between someone who is kind of a full-time developer and someone who has more of a faculty position. So, one of my new jobs since we last talked, is the interim director of the Digital Commons. So, this is a new faculty development initiative here at fader belt. It's housed in the Vanderbilt libraries and I am the startup director. I'm still doing all my other jobs here, but this one's, this one's an exciting new one. And our mission is to equip faculty with the skills they need to use digital tools in their scholarship and in their teaching. And the teaching part of that. I know that landscape really well, but it's new to me to kind of explore digital tools in scholarship and research and what, what the needs are that faculty have. And so here's a question that I've been struggling with and I love to get your insight on this. So where or how should we draw the line between technology skills that faculty should develop for themselves versus technology skills where they, they need to partner with someone else who's more of a specialist?

Zoe: [38:31] That's such a great question. I probably come to this like every day. I always think

of it as the line between what can be infrastructure, right? What can be kind of versus what is your own interpretation? Where do you need to actually do the work? And of course, what I think you're asking is more maybe on the research data management side, but it could flip on both, right? The, the research kind of interpretation side as well. I think it's, it's aligned. We are all still kinda currently negotiating people, libraries, people in different departments and outside of the humanity says, well, it's still this really weird, nebulous space. I mean, if you think about it, this last decade has just been truly insane in terms of what cloud computing has enabled in a way that people just kind of take for granted, right? Because it's just there. It's so easy now. But it's also kind of, I think, fundamentally transformed research, right? And now with the pandemic, I think that's only just kind of accelerated everything, right? So I think, you know, it, it does, you know, in some ways it will always be very, very idiosyncratic. It's kind of like your workflow. Are you a scrivener person like, you know, do you feel strongly about the seas like that? There's a degree of that, but I also think there's a way in which it's particularly a struggle. Because like you said earlier, the way you're taught is having to teach. And for a lot of faculty currently, we're taught prior to this massive kind of just total sea change in what's possible, right? If you're able to go to Database and just pull up all the surgeons, right? How do you kind of process that as a humanist these days? I mean, there's been some great articles about this. Lower Putnam in the American Historical Review has a great article about this. And one of my colleagues here at Illinois, Antoinette Burton, just came out with a special issue in the Journal of world history, but somewhere on this question. But it's something we're still kind of negotiating. I think the thing that I try to help people to get a sense of is a kind of working pass the magical thinking when it comes to digital computation on stuff. I think a lot of people now, but they're like in the Silicon Valley, like I'm going to be a billionaire with this idea. But I think, especially if they haven't really dealt into what a computer can and cannot do, it does feel very magical still. So coupling them, understand. Actually like, Yeah, if you want to do this project, it's going to require this. And in fact, the, the sad I would say is a data cleaning data entry data all that. It's usually to 70 to 90 percent of the digit, like any project, right? And that immediately kind of like you can see the little like deflate ANY perfect for me. And I don't have to do is work like the computer cannot automate it. But at the same time, I think a lot of, especially humanists don't realize that, especially the manual data entry, they could really, really leverage. Very simple, whether it's regular expressions, whether it's open, refine like there's lots of points there where you could essentially accelerate some of your research writing. Don't have to enter it all named. And so those are kind of other points. I'm trying to think, you know, there's so many tools out there and they just keep coming out and I feel like we've all

seen enough kind of come and go at this point that it's more about kind of thinking thoughtfully about preserving your data in and all these kind of things which you know about. But I do think there's room for collaborative work, but I also think in some ways it needs to, if you're going to go that route, maybe think of it more as collective, right? Like don't think that I can outsize, outsource all the digital stuff. And that's going to be sufficient, right? Like I think people really need to understand that the digital stuff is the interpretation. It's not just kind of dusting on top. And so that's what I spend a lot of my time do me talking to people and I think most people are interested in learning these things. There's just very few resources, so I'm super excited to hear about the Digital Commons. I mean. I think, you know, definitely creating networks between disciplines is useful, but also just giving people the time and space to kind of delve in and spend some time thoughtfully with itself. Yeah, you know, I've met increasingly history professors that have taught themselves JavaScript because they wanted to do some data visualization. And that's amazing to me. That's fantastic. And that's, you know, someone who's willing to put in the work and also probably has never going to be a data visualization scholar, but could benefit from some more kind of support there to understand what is the landscape of what's possible, how to put their time. So can people to figure this out on their own sounds crazy increasingly, right? But at the same time, think it's also important to be like Yang catches, get a grant and think that somebody else is going to do all the work for you, right? Which sometimes is that each model, it's easier to get grants than it is to support your own learning sometimes.

Derek: [43:44] Yeah. Yeah. Well, I think there's a need as I think you were saying that if I'm going to work with a collaborator who is an expert in this kind of tool set. I need to know enough about the tools to have a conversation and to know what it can do, what it can't do. And once we start talking about interpretation. But you know that the, all the levers I can pull can't be a black box like I have to, I have to understand how some of those things work so that I can make meaningful interpretations of the data, even if someone else is doing the heavy lifting on, on, on building the thing. **Zoe: [44:18]** Absolutely. Let me add to that because this is something that I think it's really unclear initially and has led to some really cool DH projects. But I feel it people think that's the warm. I actually almost ended up doing a post-doc in the CS department at Vanderbilt. Because there's a data visualization scholar there. And the wrist, the new interdisciplinary Data Science Institute. And we were chatting and it looked like a great fit from 30000 feet. We started digging into the project more, digging into the project more and not in a bad way. But what interested him versus

what interested me was very different. And this was data visualization. This is not the most like there's some more theoretical areas. It's yes, as you know. And so I think the thing is to understand that if you're going to collaborate in a swap with a scholar and a different field. It, it's not going to be straightforward. They're going to have questions that are different and that interests them in different ways. And it's not going to be this kind of thing. We do set the project goals and then they just produce it. They're going to have their own interests. And it might look very different and it's not as simply as translating it to humanities questions. We, We are not often interested in ground-truth in the same way that a lot of other fields, we don't count cells, right? There's not that same level of granularity. And so it can be difficult to kind of get people to understand that there's a lot of speculation, even when you're doing this kind of modeling work, there's a lot of, you know, the best guess and perspectives and these kind of things that don't necessarily make sense to someone that's worked in bioinformatics their entire life. Like you have to also translate for them as well. **Derek: [46:00]** Yeah. Yeah. Well, I wouldn't ask maybe one last question to talk a little bit about teaching, which is core topic. Here is the podcast.

Zoe: [46:10] Absolutely. **Derek: [46:11]** So it's been a, it's been a weird year and a half in terms of teaching at the university level. And I'm curious, what have you learned about teaching in the last year to have that, that you think you'll carry with you once we're hopefully out of this pen to the bank and teaching and more, more expected contexts. **Zoe: [46:28]** Yeah, That's such a great question. I'm actually teaching online this semester again, which was decided kind of before everything with Delta kind of. It's not that we're in rough shape here, but it actually worked out well. So, I feel very grateful for that. But one of the things I think is obviously, I think society writ large is just kind of taking it a bit more easy, not overloading the syllabus, being, kind of feeling more comfortable, kind of telling students to privilege their health. Saying it's okay if you didn't finish everything on the syllabus, this kind of grace that I had felt was what code is unprofessional or and serious, but I think is actually something that I care a lot about. There's no reason we obviously do want to push it and you do a ticket structure and we don't want it to be all loosey-goosey, But I think giving more Greece and care and, you know, foregrounding that is something that I definitely hope to take forward. There's also some practical things. You know, I, I teach a lot of coding and that is a lot easier to do when you're in person. Because you can kind of have people go into little groups and kind of walk around and see who's struggling and who's not online. It is far more difficult to know what's happening. But one of the things, this is just one like practical tip. If you've listened reservoir here it is. I tend to live code my screen

and ask the students to tell me what to type. And it's one of the best ways I've found to get them to engage still into work through the kind of logic without just giving them. Jupyter notebook or a script and having them kind of read it themselves. It involves still some kind of interpretive work. Now it can go a bit awry when I forget the right code syntax, but sometimes I'll just googled lot. And I think that also shows them that like yes, it's okay. You don't have to remember every single little thing. You can actually look these things up. What's more important is kind of thinking about the bigger picture and how you want to structure these things. So that's my, my one tip. But the bigger thing is just being kinder and feeling that that is professionally necessary and useful and a good kind of way to set the tone. Yeah. **Derek: [48:48]** Um, well, and I think I mean, you're not alone in that realization. And I had a version of that myself too when I taught this past spring. And I realize, look at the end of the semester, I need to submit a final grade for these students. Up until then, all the deadlines are a little artificial, right?

Derek: [49:03] Absolutely. And so, you know, and I have to mind my own time, right? I don't want to have to grade all the things that students did in the last four days for the grades are due. So, I can't kind of let everything pile up for the end. But if a student needs a couple of extra days to finish a paper assignment or coding assignment. Like generally that's not the end of the world. **Zoe: [49:25]** Right? Well, and I think when you're able to make foreground and explain to them that I'm not setting this deadline to make you miserable. I'm setting this deadline because we need to hit these kind of milestones. And if you need more time, we can discuss that, but I don't want you to lose out on this opportunity. It feels much less, I think, punitive and gets them to understand kind of the logic here, which is like, yes, I want you to kind of produce this thing at the end. I want you to have something that you feel kind of intrigued by an excited with and we're ready to kind of keep working on post semester, which is always the dream for me. I never, I need to follow-up with my students more to know if they do that actually, but that's always how I tried to design the course is project that you'll take after the semester and keep rolling with yeah. Yeah. And at least the potential of it, right? I mean, that that alone makes the project feel more authentic. The students that have something you do kind of as busy work. Yeah. I pretty much every student I've talked to start off the semester being like, I have no project. I don't know what I'm doing by the end or like I feel so strongly about this. Like I'm so like they get to the buyer will have to be like, okay, like what is realistic here? Like you can't, you know, build an entire kind of like data visualization career in this semester or so. But that's exciting. That's, that's the dream. Yeah. Well, and I'm so glad to hear you share some of that. When you were

in the podcast before that you hadn't taught your own course? **Derek:** [50:56] I believe I think that's just been an assistant and we're going to try out some different techniques and tools in that TA role. And now you're getting to do whole projects with students. And so that's really exciting.

Zoe: [51:07] Absolutely, Absolutely. It was fun to listen back to Google Twitter assignment and it's such an interesting snapshot because it was just an exciting time in my life, but also I hadn't realized how much. **Derek:** [51:25] Well, thank you so much for coming back on the podcast. This has just been envelope delightful conversation and I'm, I'm glad to catch up and hear about all the cool stuff you're doing these days. **Zoe:** [51:34] Yeah. Yeah. Thank you so much. **Derek:** [51:41] That was Zoe LeBlanc, assistant professor in the School of Information Sciences at the University of Illinois at Urbana-Champaign. I was very excited to have Zoe back on the podcast after five years. So, he was one of the first graduate students at Vanderbilt interested in the digital humanities that I worked extensively with. It's been a thrill to see how she has carved a path for herself and academia. And I'm glad to know that she landed in a faculty position. That's such a good match for her expertise and interests. If you'd like to learn more about Zoe and her work, visit her website, [Zoe LeBlanc.com](http://ZoeLeBlanc.com). Check the show notes for a link. You can also find her on Twitter at [Zoe underscore Lubbock](https://twitter.com/ZoeUnderscoreLubbock). We are on Twitter too, at [leading lines pod](https://twitter.com/leadinglinespod). We would love to hear from you. They're particularly if leading lines has been a benefit to you and your career over the last five years. Leading lines is produced by the Vanderbilt Center for Teaching and the gene and Alexander hurt libraries. This episode was edited by retina McDaniel. I'm your host, Derek. Thanks, Phyllis.