..Research focus 🧴

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i'm starting my second year of my phd and i mostly focus my research on

finding like potential synergies between classical symbolic approaches such as knowledge graphs and ontologies with a sub-symbolic learning methods such as most neural networks and deep learning related models and i'm mostly focusing on knowledge of embeddings on enhancing knowledge of embeddings by using deep learning approaches and also extracting symbolic information from deep learning approaches so

it's not really properly defined or closed yet but i'm mostly working like in the intersection between those both fields so how long have you been redefining your research problem when did you start thinking or considering well i actually didn't have that much time to define my topic because it was like designated to me by my supervisor and on my master thesis so i've been working on this before starting my psd it was part of my master thesis and it would be like two vears veah it would be like over two years ago more or less that's nice to know so actually you graduated your masters and then immediately you wanted to do the follow-up on your yes and and extending your your master's basically yeah you know when you finish your master thesis and you apply for the phd you should have to find your you're the supervisor so it wasn't the natural procedure i had the same supervisor that i have a master thesis so it was more or less clear that the topic would be the the same it is also an a very interesting topic and most because my background on the thing that i did before joining the group was mostly related to deep learning on itself like mostly applied to images so we need to find like a middle ground that that was between my original background that was mostly material learning with the things that were being developed in the group which are mostly you know knowledge wraps link data intelligence etc so without on starting this line that um

well it's working mostly in the intersection so we focus on knowledge of embedding there are a lot of work to do as we could also have focus for example on world embeddings or classification or all that but do you feel like your master's is served as the the basis for or the foundation for your phd yeah in this case the the master program that we have here we have like two types of master one of them is like the one that creates you as an engineer and that one is mostly focused on you know once you finish you work in an enterprise and you can sign projects and and all that and the other one which is the one that i did is an investigation a research master so it it is like a pre like a preparatory for your phd and they teach you research methodology and and all that so it gives you like a good foundation for for your psd and people that take that master are supposed to follow on during the phd once they finish right yeah so the main reason for you to decide on doing your phd is want to extend your master thesis basically no not exactly doing your master's thesis well the final goal would be to become a full professor but the thing is that i've always been like attracted to doing research more than working on a on a company and when i was even under graduate and i was like in the last year of my degree i joined another group another research group the division one and i really liked it there i just i did like a brief internship and then i continued doing my end of degree work and i really liked that and i thought i want to continue with this with this path i don't want to to end it i want i don't want it to end here

..Topic assigned by supervisor ...Master's thesis ...Topic comes from Master's thesis

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..Joining research group ...Middle ground

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..Research personality **Q**

..Satisfaction &

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..Research personality ..Research personality ..Full professor

..Satisfaction & &
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PhD journey goal

..PhD journey goal **Q**

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and then join a company and do something that is really unrelated to this i it's really like i really like the you know the research the procedure the learning the the reading all that stuff i really like that and i i wanted to continue doing that yeah so you're really oriented to academia yeah i'm mostly oriented to academia i'm just i'm working hard towards the goal of becoming a full professor so

yeah it's a compulsory part of the journey and so far it's going good i'm enjoying it it's out of work because i think that the the experience that you have on your phd really find on the what is your goal what do you do what do you want to do with it if you want to do to become a full professor you have to reach like certain merits because you don't have to credit yourself on like on an institution and you have to apply for the for the job and it's like a really competitive word so it can become really stressful because you are trying to engorge your cv and and that can be stressful sometimes if you want to reach that goal if you are just doing it for the learning or you are doing it to you know reach higher positions on companies or work more or less oriented towards innovation instead of academia it should be different in my case it's just it's mostly focused on on reaching enough merits to become full professor as soon as possible so yeah so it makes me think like you really know what are the steps has to be done yeah you need to achieve that really big yeah of yours so you have you have a really redetermined yeah i'm really directed towards that for for several people like i've met like they they tell me that some that the decision of opting into doing a phd it's just to delay their life decisions because they didn't know what to do so some people try to like explore yeah and they don't know what what awaits them just know where they go which is you in this case yes well of course i think that if you want to you know to study and to to learn when your younger is better so i wanted to to take the to serve this this wave that i'm having of degree master and then psd rather than stop and then taking my phd i thought i think it would be harder if you do it that way so what's what's part of your decision like who you are what kind of personality do you have like curiosity do you have are you curious yeah i'm the yeah you can you can't sleep without thinking yeah i'm i'm really eager for for learning and for starting and knowing knowing this stuff

thirst okay so yeah that's really amazing and you have my admiration thank you so um

can you mention the most original part of your pid that you are trying to achieve is to

originally in in what sense like the i mean what is the

the the lever for pushing the boundary of knowledge that you you want to to to come come up with well i ideally it will be yeah ideally we'll be extracting rules or give explanations to predictions made by knowledge of many models you know all this opening the black box trend that is going on on machine learning especially and i'm now really focusing on that and to tackle that i divided it in sub tasks and that's what i what i'm trying to do but the final goal would be will be that so you have a vision of that when your phd is finished absolutely published people start using it what would change in in your mind you know for now in the future in the vision that you want to have do you feel like that what do i expect that will happen to the thing that i developed in my pc thesis once i finished my pc thesis

..Uncertainty of goal $\, {f Q} \,$

..Self-underestimation ...Aspiration

..Doubt **6**

..Doubt

..Satisfaction **\(\bigcirc**

..Social environment **\Quad**

..Encouragement **&**

..Social environment **Q**

..Social environment 6

well hopefully i will develop like a proper tool with that because now it's a lot of algorithms and set of experiments but i really like people to to use that because the idea is that when i came to this group people here do not have like the background on machine learning all that stuff and that's that trend is coming really strong nowadays in all the research so i think that but the people working from this field and well from every field that want to know what's happening and understand stuff so it's i think that it will serve like as a good intermediate between the people that are working on on developing all this knowledge what stuff and the people working on the field so hopefully it will be used hopefully but i don't think that i'm going to be remembered by my phd this is nothing that no one is so yeah i try to be realistic i know that my busy thesis is not going to be memorable but hopefully it will be good hopefully this is a strange business i.t and computer science you know like girl because the things that we do today we invent today will become obsolete yeah like really soon yeah soon it's just yes fast-moving world so it goes and comes and goes and comes and goes really fast so yeah but at the end of the day there are like very few thesis that have been like memorable or have really done something that's really revolutionary it usually comes from more experienced researchers rather than phd students so i don't think that you have to to get all that anxiety about doing something really yeah impactful breaking at the end of the day that's not really it's all about science i think in my opinion it's all about scale yeah so a good idea but no skill nothing yeah but you have to like put it into use right yeah i think that when we all come to to do research at first we are like really naive and we really think that we can change the world and develop something really groundbreaking but i didn't i don't think that nobody is going to to make it that far like doing some probably ground breaking and you have to really be content with what to do and have even a little community of people using it and to be respected by by people

that's it no i think it's no more yeah very common so let's let's leave that area for a bit and we talk about the people you work with so who are the most important people you work with in and out of academia what what kind of influence do they have on you out of the academia i don't really work with anyone well of course some of the people that have the most impact on me are my supervisors which are really yeah i have two supervisors and so far i'm really happy with them you know we have of course we have our little discussions and all that but that's part of the learning procedure but so far i'm really happy with them they are like really really good people and the people that i work with in the lab are amazing i really love them and they are like aside from be like properly very good human beings they're they are really somehow inspirational because when you start doing your phd you think that it's going to be very difficult it's going to be very horrible you don't you won't do and sleep you will live out out of coffee and then you see that people that are farther on the on the way that that you are are doing all right and they are doing okay and they are encouraging you to do better so i think that we have a a very good little community of business students going on there because we really support each other and i think that's really really important for everyone doing a phd to have a very good security net under you because you are going to have many town falls and many existential prices and a lot of why the hell am i doing am i doing this yeah so the people here are really supportive and are really really good but would you say that one of these people have what kind of very influential impact on you so yeah so that they influence you in decision making like for

..Support from supervisor **\Q**

..Support from supervisor **\Q**

..Benefit of having multiple super 6

..Teaching of ..School duty

supervisors like for example yeah of course my supervisors are the one that that dictate and listen and take part in the decisions because they are the people that are supposed to be teaching me and so they they know better i'm i'm new in this world and they know better and they are the other ones that help you make the decisions and gives you all the information that you need to to take them so to me like supervisors are there to guide us and direct us to the the the correct direction basically so and the and the care the maintenance of the supervisor what would you say what would you say what would you say that the supervisors thought would you would you prefer a more careful that that cares about you more or care about you less like i mean i mean like got you along the way tells you what you should do or the ones that lead you out there of course the middle ground would be the optimal thing because if you are on your own you are going to miss a lot of a lot of the learning process and but if they are like very sweet people and they take make all the decisions for you it's like i it's like what's what is my role in this phd if all the people are taking the

decisions for me yeah it's like it's like you are not import an important part of your phd in the yeah well i had some problems with that like previously and it's like i want to be it's my phd i have to to make my mistakes and i have to learn and of course your supervisors always mean good and good intentions but i think that is important that they let you make your mistakes but that they also support you and teach you and and all that if they are really carefree you are missing a lot of the learning process and if they are like really straight you're also missing part of the writing process so i think around would be so up until now you have experienced the supervising of for you that has been kind of in in the middle yeah and that suits you yeah for the timing well one as i have two supervisors there's like a compensation between them because one of them is more like i don't know the word for this like more

restrictive not respective but he has like very clear ideas on how things should be done and it's like this is going to be this way because this is a good way and it's what about if this other thing is also good so they kind they kind of compensate each other because they are both on different levels so of course also in the academia one of them is like starting and the other one is has been missing from time so they they really compensate each other so so far my experience with them and it's been vegan so do you expect as you become more senior or more experienced do you think that they will start to diverge probably i don't think so i think that's going to be like really parallel and the ones that i feel is my phd they are going to yeah so i just just just leave you alone no not leave me alone but well it's like you know it's like having a baby somehow you have to teach them and feed them and all that and then until one day they become autonomous so that they will be i think when i you become colleagues right so i think that they are they will i don't think that they are going to you know let me let me on my own unfortunately i think and even after that i don't think that they are going to love me on my own at least i hope so okay so do you have any other academic activities besides research how do you teach or do you

i well i have to teach as part of my formation for phd so but i haven't started yet i'm going to start next week so if you have came a week later i will give you some feedback on that but i haven't really started doing my teaching my lessons i i started teaching like like right away when i got into phd well he was like i think that that depends on the on the specific systems of his country

but he was like really really difficult to teach because there is little you know you have a limited amount of subjects you can only teach in those subjects where your supervisor is teaching and you can teach only certain content you can you can evaluate people you can teach like theoretical lessons so it has to be like really specific stuff and really restrict to the maximum time that and you have a maximum amount of hours that are like 60 a year or something like that and in my case for example out of the 60 hours that i have to dedicate to teaching and teaching support lessons that include like you know caring exams and yeah teaching assistants yeah that properly teaching hours that i'm in the in the blackboard teaching stuff are like only 12 out of those 60 so okay and that's like the maximum that that i could get do you feel like that this kind of distractor for your phd like it takes a lot of time and it kind of interfere with your phd or not no it helps you does it helps you yeah i really like it in fact well and of course if if that's aside from being part of my phd in the pure research area also as i've mentioned you before you have to create yourself in order to become a full teacher so teaching hours are a big chunk of that so it's not exactly that are these joint spaces my phd and the teaching they are like merged so i don't see it as a waste of time but that's something that i have to do and something that i like to do so when first when first i started teaching i really liked it but the problem then becomes the students right some of them are not so cooperative so yeah you are so yeah that's one of my biggest concerns with teaching this is the worst nightmare of a teacher you know like students some sometimes are really out of out of out of mind okay so the question before the last one have you experienced any kind of major obstacle up open sooner

what kind of obstacle are we talking about you know like the usual existential crisis that we all experience no doing like something the things that have you have to take compromises for

you to give something in order to yeah yeah

well so far my two main problems have been one of them infrastructural that i well i didn't have a gp igpu and that has been a major problem because i couldn't do my experiments but it was like we are not going to buy this only for you for your thesis because there's a weight of our waste of money so institutional institutional support yeah that's what that was one problem and the other problem was that well that you know some disagreements that i have with my with my supervisors like in the puzzle about what did this work with publishers work in our conference no because it's better for you to do it here in my case i have a lot do a lot of paperwork whenever i go to business trips yeah paperwork is the worst i forgot that yeah paperwork bureaucracy in general that's horrible management it's like yeah that's how this help so the last question do you have any journal of some sort do you do journal do you write to keep track of your hd i used to but not from well not for my phd but before starting my phd i used to journal a lot but currently i didn't really do that maybe because i don't have time maybe or whatever but do you think that it would help you well i have like like i work journal where i write what i have been doing like in work terms but not like a personal journal about how what i've been what i've learned or what i've done or how it has impacted me as a person but i should start doing that it should be helpful it should be some of the benefits of generating is like if it improves mood it reduces stress also so i would recommend that yeah i think that well when i when i journal that i was like in a bad period of my of my life it was you feel a lot of relief once that you see that you may be thinking







that you have a bad day or that or whatever and then you look back on the journal and says wow i have improved a lot and things are going much better than they were going so yeah that also helps and so maybe i will have to start doing that again because when i did some literature review on phd phd in then i i found a lot of people in the world that they just talk about the experiences the steps how how it was like painful enough not painful beautiful experiences as well so i think it's it's a place where we can organize our thoughts and just just put it there and and later we can reflect on it so it really has has some some really good benefits but yeah so we have limited time so we have to we need to come up with the solution on that on that thing okay so thank you so much thank you so keep you updated on how i'll make a good story for you to to witness okay which will be based on your story basically thank you it's like the the goals this interview is starting to actually construct your your path from start to beginning from start to end well that's really really cool yeah and maybe some some kind of animation would be yeah would be really really good but there's a lot of work to do yeah until i finish i'm not even in so maybe we can do another one ui yeah when you you are supposed to come back some time to do like an internship or something maybe then i have them a lot of more stuff that i can we can do it like online you know like skype whenever we have your time whatever you prefer okay so thank you so much