

Kavan Mehta

Mrs. Secord

ISM 1

11 February 2022

Interview Assessment #17

Name of Professional: Vassilis Athitsos

Profession/Title: Professor

Business/Company name: University of Texas at Arlington

Date of Interview: 2/11/2022

Assessment:

I recently had an interview with Dr. Athitsos to discuss machine learning and computer vision to solve problems in the real-world and learn more about the theory behind the implementation of machine learning. Through this interview, I hoped to ask him for his mentorship and guidance, learn about what I can do in machine learning, and gain a better understanding of how I can learn the theory behind machine learning. During the interview, I was extremely grateful for the opportunity given of being a mentee under Dr. Athitsos, was able to learn the importance of learning the theory and the thought process behind machine learning models and libraries, and I got a few examples of some projects that I could create myself for my ISM research and product.

I firstly discussed with Dr. Athitsos about his experience with machine learning and learned about the importance of learning the theory behind existing machine learning models and libraries. I think it really helped me to understand the difference between academia and industry in the field of machine learning as I learned how often in industry, software engineers only use

existing libraries often without understanding how the technology works to create models but academia is very focused on creating new implementations of certain models to innovate new libraries and facilitate research that could be used in the future. This creates a huge problem in industry software engineers as there is a huge gap in their abilities as they often do not understand the mathematics behind a certain theory and thus are unable to innovate and efficiently use these mathematical machine learning models. I think this really aligns with my initial goal in ISM to learn about the machine learning theory to strengthen my foundations in machine learning and use these existing models effectively for my own final product.

Furthermore, we discussed some examples on a final product that I will create for this semester in ISM. I actually got some feedback on my first product proposal that I created two weeks ago and learned how I needed to focus on a specific restricted topic in a particular subject if I want to create a model that solves homework problems for students. Another example that I found was very interesting was creating a project with computer vision to analyze gestures to complete certain tasks hands-off. This could help solve problems when someone's hands are dirty or when you have a certain amount of items in your hand and thus can't view your phone or a device by using hand gestures to create or view an email, look at particular notifications or apps, and there is so much more! I think these two ideas are a great starting point for my journey to create a final product in ISM. With Dr. Athitsos's advice and all of my learnings from previous interviews, I think I have a great start for several ideas that I could possibly create for my final product. Also, I am extremely fortunate to receive the opportunity to have Dr. Athitsos as my mentor for ISM and am excited to really deep-dive into machine learning with him!

Overall, I felt that the session was really helpful in guiding me to learn about machine learning and how I could try to solve real-world problems and learn the science behind machine

learning! Furthermore, through Dr. Athitsos's guidance, mentorship, and resources, I hope to learn machine learning effectively with theory and implementation, and implement this learning in my final product to solve real-world problems. My goals are still the same to continue the learning process for machine learning and am very excited to start working on my final project!