Cover letter

To whom it may concern,

I am Masoud Akhgar, having M2 Master MOSIG program from Grenoble-INP Ensimag department, and Computer Engineering bachelor degree from the third university in Iran. This interest to Information-Technology, coincided with experiences on experience on my paper that I gained during my BSc, had led me to investigate more in graduate studies. Thus I would like to pursue and contribute to real-world problems and expand my domain of expertise. It can be regarded as my main goal of all time to see my accomplishments as a practical outcome.

In addition, on a mathematical research which we applied on images, I tried to implement an optimization system in my following activity. I investigated through various papers and loss functions with the potential to be applied for noisy images. Finally, we proposed a resistant approach against noisy images in which I minimized the amount of error defined by correntropy loss function and the least square to detect and remove **outlier noises**, resulting in a high level HOG of the image as the output. It came out such a powreful method that we decided to submit it as a scientific paper. I **attached** a recommendation letter of my professor to this file.

As my commercial activity, I was invited to perform a natural language project in Persian in a company giving me a perfect experience when I classify **scrapped words** using just description-based subjects. It was done after pre-processing like removing stopwords, using word2vec, TF/IDF, etc. Finally I classify the representation vectors to different groups and preparing query responding. This profound of NLP of mine completed by similar experience during my Data-Mining course using **Bert language model** and several decision-making models to classify the data scraped from TUM university website.

I am commitment to the deadlines having a sense of responsibility. Talking about my experiences and responsibilities I'd like to mention: read more

My last experience, at Schneider Electric in Grenoble, the project was the estimation of the part's cost. To support the design to cost method with this project we want to use ML-oriented methods to estimate the cost of the parts based on the data records in hands to allow the non expert like a Designer, using just visible features.

I had encountered many problems such as small and imbalance dataset in which I proposed insight and ideas inspired from novel related papers. I am proud of mine to push practically the edge of technology for the SE company. Please feel free to contact my supervisor to confirm and be aware of his satisfaction during the project.

At this point in my academic journey, I feel the necessity to gain more work experience and develop a deeper understanding of the challenges faced by a world-class company like your Company, and I envision myself as an ideal candidate for this position, having not only practical implementation experience with generative networks and recent transformer models but also knowing their underlying math and theory.







Department of Computer Engineering, Ferdowsi University of Mashhad, Mashhad, Iran November 25, 2020

To Whom It May Concern,

I know Masoud Akhgar for about a year. It was fall 2020 when Masoud, as a B.E. student, took the "Signals and Systems" course with me. He took a score of 18.25 out of 20 in this course (average score of the course was 14.89). Because of his ability in this course, I asked Masoud to be a TA in this course.

After joining my laboratory, I know Masoud as a determined person. When he started to research HOG, he never decided to do research unless he completed and achieved it with great effort. I believe he will be able to investigate and gain anything he wants. Also, his practical skill based on his science is brilliant.

I can say that I found Masoud a trusted student for research. I strongly recommend him as a perfect choice for any research. For any further information about Masoud, please contact me.

Best Regards,

Hadi Sadoghi Yazdi, PhD

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