



1. Motivation Letter

Dear Professor Max Welling and UvA admission officers,

My life goal is to pursue a research career in Machine Learning. Therefore, I believe working with Professor Max Welling and AMLAB's members will get me ready for my future career.

I found out about AMLAB thanks to the paper titled "Semi-Supervised Classification with Graph Convolutional Networks" by Thomas N. Kipf and Max Welling. During that time, I was developing a graph embedding method based on network motif patterns and skip-gram model. The "normalization trick" introduced in Kipf's paper is exactly what I have been looking for. Followed Kipf's implementation on github, I injected the motif co-occurrence matrix to the second graph convolutional layer to achieve slightly better results compared to the paper. After reading more about AMLAB's other members and projects, I decided to apply for the available PhD position because I know I can learn a lot by working with people in the group.

My undergraduate major was Computer Engineering and my master major is Computer Science. I have received training in calculus, linear algebra, probability theory, computer architecture, embedded system design, network science, and machine learning throughout the years. Besides official courses provided by my affiliated institutes, I also extend my skills set by taking free courses from Udacity and Coursera. Although not being particularly stellar, I believe I have satisfied the basic requirements for the available PhD position at AMLAB.

To me, the most important factor in a working environment is the people I work with. Thanks to my time in Japan, I have learned the joy of living in an international environment. I have learned many skills thanks to friends of various backgrounds, from wifi hacking to using Teflon for leakage prevention in chemical experiments. I always learn much more from other people compared to what I can help them back. Nonetheless, I do enjoy learning and teaching (when I can). Although I cannot guarantee a scientific breakthrough in my research, but I am absolutely sure about my passion for learning. As I mentioned above, I believe being a part of AMLAB will be a great learning and working opportunity for me.

From Professor Richard Feynman's book, I found myself in the description of one man named Frederic de Hoffman. Feynman described him as follow: "Not highly trained, he liked mathematics, and worked very hard; he compensated for his lack of training by hard work". I am not a fast learner, but a deep one. I hope that there will be a chance for me to be considered for the available PhD position at AMLAB.

Sincerely,
Hoang Nguyen.

