Prospective Ph.D. Student [2023] - Xiaoqin.Feng – Mobvoi AI Lab

Dear Professor Zhiting Hu,

My name is **Xiaoqin Feng**, a Senior Speech Algorithm Engineer at Mobvoi AI Lab. I am applying for a 2023Fall Ph.D. with motivation and passion in research. I have known you from your website, and I am very interested in your research areas (NLP, structure knowledge acquisition and controllable text generation, etc.) as I have related experience. I would like to explore the possibility of doing my research with you. **Importantly, I have listed you as my first choice in my 2023Fall application for the HDSI, CSE program**, I sincerely hope this message can find you well.

I received my Bachelor's and Master's degrees in computer science, and I am motivated to apply AI algorithms to serve our daily lives better. After I gained years of research and work experience in different areas, including computer vision, recommendation systems, knowledge graphs, and data mining, it shaped my interest in natural language processing (NLP). The following describes my abstract of the research journey, I prefer to give you my website link to get more references.

I joined **TAL AI Lab** as a research intern within four months. I proposed a deep knowledge tracing (DKT) model to monitor student knowledge state or skill acquisition level based on historical question-answer series, which is critical to the tutoring system. Our proposed research demonstrates the importance of the ''relation'' information and outperforms state-of-the-art baselines significantly. Eventually, we submitted a paper to AIED (top conference in education AI). In 2019, I joined **Mobvoi AI Lab** and mainly focused on text mining of text-to-speech regarding semantics and emotions. For semantic NLP, my work converts non-standard text into representations with accurate pronunciation, prosody, and spoken events based on cross-lingual. The emotional NLP focuses on the intrinsic aspect of language understanding, such as speaking style, stress, and emotion. These two projects covered knowledge of criterion establishment, cross-validation, data mining, linguistic learning, contrastive learning, knowledge distillation, pre-trained language model, multi-task training, semi-supervision, etc. It has led to applications, research results (*PRML2022 & INTERSPEECH2023*), and several patents.

Deriving inspiration from data mining, knowledge acquisition, and textual extraction,  I am interested in extending my experience in unstructured, cross- or multi-lingual text information extraction and understanding, also I did some projects about multi-model in Dialog and NER.

If you are interested in the proposed study and want to know more about me, I am ready to communicate further with you via email or video call. You are also welcome to refer to my CV attached to this email. Moreover, my personal website is [*https://xqfeng-josie.github.io/*](https://xqfeng-josie.github.io/)and my online CV is [*https://xqfeng-josie.github.io/resume/xiaoqin\_cv.pdf*](https://xqfeng-josie.github.io/resume/xiaoqin_cv.pdf)*.*

I realize how busy you must be, so I highly appreciate any time you can reply to me. Thank you very much.

Sincerely,

Xiaoqin Feng