03010916 PhD + Mobvoi AI Lab + Xiaoqin Feng

Dear Professor Zhao,

My name is **Xiaoqin Feng**, a Senior Speech Algorithm Engineer at Mobvoi AI Lab. I am applying to USC for a Ph.D. with motivation and passion in research. I have been known you from my friends, and I studied some of your public results about model robustness and bias measure (gender is most) [notes](https://www.notion.so/Dr-JieyuZhao-611c251561c54ed1ad13f2c81de2f8e9), I am very interested in your research areas. I would like to explore the possibility of doing my research with you.

    I have been involved in several research areas such as knowledge graph, recommendation system, data mining, also including**natural language processing** which I really focus on. The following describes my  abstract of research journey, I prefer to give you my website and personal statement links to get more reference.

    In my first internship (TAL AI Lab), I did research on deep**knowledge tracing** based on question-answer series. Our proposed model not only grasps the sequential dependency but also explores the intrinsic relation of information. Indeed, it demonstrates the importance of the side relation information and the proposed framework outperforms state-of-the-art baselines significantly. *(AIED2019)*

    I also studied language understanding regarding semantics and emotions (Mobvoi AI Lab). During which I have mainly been focused on **text information extraction** of text-to-speech, including semantic NLP and emotional NLP. 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**, on the other hand, 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, and semi-supervision, etc. It has led to applications and research results (*PRML2022 & ICASSP2023*).

    Deriving inspiration from knowledge acquisition and textual extraction,  I am interested in extending my experience in unstructured, cross- or multi- lingual text information extraction and understanding. The texts contain rich implicit information that is critical to help us understand our society, such as fighting against toxic online comments. I hope to contribute to a more precise understanding and reconstruction of information during my Ph.D. study.

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/)*.*

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