25th April 2022

To Whom It May Concern,

Hello!

My name is Yan Zhang and I would like to apply for the position of " NLP Research Scientist at Alibaba DAMO" posted by your company. Here are my basic information.

I received my B.S. and M.S. degrees from Wuhan University in 2018 and 2020, respectively. I am pursuing my PhD in GIS at the State Key Laboratory of Mapping and Remote Sensing Information Engineering, Wuhan University under the supervision of Prof. Chen Nengcheng of the Geospatial Sensor Network Research Group. Currently, I am a visiting PhD student (2022.1-2023.1) at the Laboratory of Urban Analysis, National University of Singapore, under the supervision of Prof. Filip Biljecki. My research interests include geotagged text (social media) and geotagged image (street view) analysis using natural language processing (NLP), computer vision (CV), and multimodal techniques, also includes web crawling, WebGIS and geospatial knowledge mining.

If you are interested in me, you can visit my personal page: **yemanzhongting.github.io** for more information on publications, awards, and educational background.

Alibaba is one of the leading multinational Internet companies in China. Machine Intelligence at DAMO, Alibaba Group, has hundreds of researchers and engineers, works on creating disruptive AI technologies that could solve important problems of the society on speech processing, language processing, image/video analytics, and optimization & decision making.

The position requires candidates with fundamental NLP techniques including natural language understanding, natural language generation and summarization. I have a lot of experience in NLP related fields, and I would like to continue to learn related skills in depth, to take geo-semantics as one future research direction, and to publish related papers under the guidance. I am familiar with programming languages such as Python, R, and machine learning/deep learning models, and have done a lot of work (named entity recognition, semantic feature extraction, graph neural networks, etc.). I have been granted a student visa, love learning, have a serious attitude, have some publication experience, internship hours can be guaranteed, and can work full or part time as allowed by law.

Personal Website: https://yemanzhongting.github.io/

Research Gate: <https://www.researchgate.net/profile/Yan-Zhang-532>

Blog: <https://blog.csdn.net/qq_34069180>

Google scholar: <https://scholar.google.com.hk/citations?user=H8T2HtsAAAAJ>

ORCID: <https://orcid.org/0000-0002-2059-4171>

GITHUB: <https://github.com/yemanzhongting>

我叫张岩，想申请贵司发布的“NLP Research Scientist at Alibaba DAMO”实习岗位。以下是我的基本情况：

我在2018年和2020年分别获得武汉大学的学士和硕士学位。我在武汉大学测绘遥感信息工程国家重点实验室攻读地理信息系统博士学位，导师是地理空间传感网研究组的陈能成教授。目前，我是新加坡国立大学城市分析实验室的访问博士生（2022.1-2023.1），导师是Filip Biljecki教授。我的研究兴趣包括利用自然语言处理（NLP）、计算机视觉（CV）以及多模态技术对地理标记文本（社交媒体）和地理标记图像（街景）分析。此外还包括网络爬虫，WebGIS和地理空间知识挖掘。

如果您对我感兴趣，可以访问我的个人主页：yemanzhongting.github.io 获取更多出版物、奖励以及教育背景信息。

阿里巴巴是中国领先的跨国互联网公司之一。达摩院的机器智能部门拥有数百名研究人员和工程师，致力于创造颠覆性的人工智能技术，以解决社会上关于语音处理、语言处理、图像/视频分析、优化和决策的重要问题。

该职位要求候选人具备基本的NLP技术，包括自然语言理解、自然语言生成和总结。我在NLP相关领域有一些经验，并想继续深入学习相关技能，将地理语义作为未来的研究方向，并在指导下发表相关论文。我熟悉Python、R等编程语言和机器学习/深度学习模型，并做过很多工作（命名实体识别、语义特征提取、图神经网络等）。我已获得学生签证，热爱学习，态度认真，有一定的论文撰写经验，实习时间可以保证，可以在法律允许的范围内全职或兼职工作。

文章 Article:

1.Chen, N; **Zhang, Yan**\* ; Du, W, et al. KE-CNN: A new social sensing method for extracting geographical attributes from text semantic features and its application in Wuhan, China[J].Computers, Environment and Urban Systems, 2021, 88, 101629. (Key contribution: Geographical Knowledge Complement and Semantic Alignment, NLP application)(SCI, Chinese Academy of Sciences ranking Q1)

2. **Zhang Yan**, Chen N, Du W\*, et al. Multi-source Sensor based Urban Habitat and Resident Health Sensing: A Case Study of Wuhan, China[J]. Building and Environment, 2021. (Key Contribution: Multimodal urban cognition with coupled streetscape, social sensing, remote sensing and other multi-source sensors)(SCI, Chinese Academy of Sciences ranking Q1)

3. **Zhang Yan**, Li Y\*, Xiang Zheng. Spatial and temporal analysis of network public opinion evolution of typhoon “Mangkhut” based on Weibo data[J].Journal of Shandong University(Engineering Science).

4. **Zhang Y**, Chen Z, Zheng X, et al. Extracting the location of flooding events in urban systems and analyzing the semantic risk using social sensing data[J]. Journal of Hydrology, 2021, 603: 127053. (SCI, Chinese Academy of Sciences ranking Q1)

5. Spatial analysis and multi-factor association mining of emergency big data (Book). Yingbing Li and **Yan Zhang**, 应急大数据的空间分析与多因素关联挖掘 李英冰、张岩.

奖励 Awards:

1. Won the third prize in the 2021 Wuhan City Circle Open Data Innovation Application Competition as **team leader!** (9/204): Wan Neighbors, Thousands of Communities, Preferred Wuhan WebGIS based Intelligent Community Management System. (5,000yuan)

作为队长获得了2021“烽火杯”武汉城市圈开放数创新应用大赛三等奖(9/204) 作品:万邻千社,优选江城-基于WebGIS的智慧社区管理系统

2.Received China National Scholarship (30,000yuan) 获得了中国博士生国家奖学金 (Top 0.2%)

3. Received Wuhan University First Class Academic Scholarship (6,000yuan) 获得了武汉大学一等学业奖学金

4. Received China Scholarship Council Funding (150,000yuan) 获得了中国国家公派留学奖学金

We deeply appreciate your consideration of my application and we look forward to hearing from you. If you have any questions, please do not hesitate to contact me.

Thank you and best regards.

Yan Zhang

Study Unit: The State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), which is a global research center in the field of geo-spatial information science. LIESMARS is the main geo-spatial research center in Wuhan University, which itself is ranked No.1 in the Shanghai World University Ranking in the field of remote sensing.

**Mobile**: +65-80385703; **Wechat**: yemanzhongting

E-mail: [E0920571@u.nus.edu](mailto:E0920571@u.nus.edu) [sggzhang@whu.edu.cn](mailto:sggzhang@whu.edu.cn)

Personal website: https://yemanzhongting.github.io/

Research group website: https://ual.sg/authors/yan-zhang/