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**Object: Statement of purpose for a research internship**

Dear Mr and Mrs:

My Chinese name is Xingmiao and my French name is just Mia. I was born in China and spent the half of my life there then I moved to France for the other half. Currently I am doing my second Master of Science in Innovation & Entrepreneurship at Polytechnique & Berkeley. I had also a master of Engineering, double major from Ecole des mines in applied mathematics and industrial engineering. I am also bilingual in Chinese, French, fluent in English and Spanish and basics in Japanese.

During my semester in Berkeley, I took Entrepreneurship as major and Data Science and machine learning as minor and I was doing a research project in NLP with French Law Company. The subject was “display and visualize the graph network of lawyers and their customers in the Law Company”. The idea is connect them through different things such as “project that they work on”, “events that they encounter each other” or other type of connection. The project was extremely complicated to tackle as we lack of data, so we spent about a lot of time to scrap people’s Linkedin and research on Bing. We used python for scrapping and word2vec for implementing information. I was in charge of literature of NLP, so I took couple courses in NLP on Coursera for the need of project. I failed in love with NLP and especially machine translation because of my passion with languages and mathematics. After returning back to Paris, I decided to stop this project as we do not manage to have enough relevant data on this project. There are another project on the same but using this time, data on Startup. I got data from another project and I used wor2Vec and NLP technical to treat them.

I also worked for 6 months as Full stack Python engineer for the Geo-statistic laboratory of Mines ParisTech. My mission was building software. This software should display Geo-statistic data through two display, node graph display and Gantt graph display. I used neo4J as database (node database) and Networkx to display node.

My previous experience makes me think that my skill will be relevant for the following project: **Analysis of the Weibo Social Graph and Heterogeneous Text-Graph Node Embedding and Applications**. I am particularly interested on the Weibo Social Graph project as my actual scientific project at Polytechnique is very similar, more Weibo is a social network that I know well as I am Chinese and I used it a lot for my personal time.

Anyway I am keen on working all type of project related to **languages and NLP** in general. I have already thought a bit about these projects and I would love to use my knowledge in mathematic and languages on these projects. Furthermore, I have already done some research project in Montreal, so I know well the method of research and I can put it in this project.

I think that my background in Applied Mathematics, languages and research will bring a lot to these projects.

Thank you a lot!