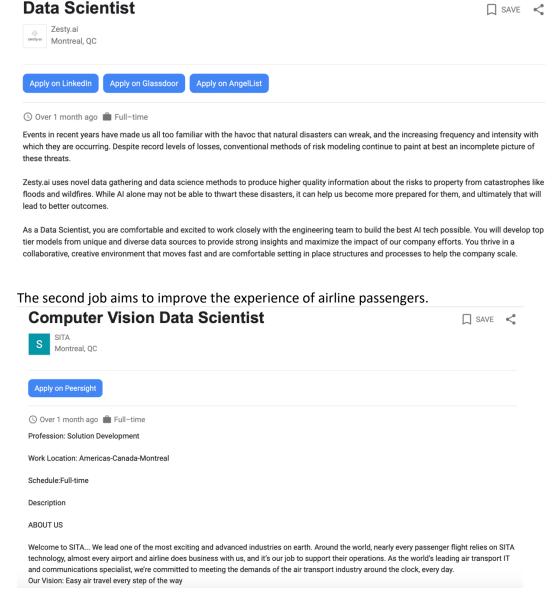
COMP 598 Homework 10 – To the future! Yan Miao 260711311

Task 1:

The jobs that are of my interests involve one or more features among computer vision, machine learning (deep learning), tackling real-life issues, or research-oriented. I have been working with on the intersection of machine learning/deep learning and computer vision in the past two years. Being passionate about this field, and after getting a general sense of how data science works from this course, it would be great if I could pursue my future career along the same path. The followings are the three jobs that attract me the most so far.

The first one provides solutions to the natural disasters using computer vision techniques.



And the third job is more on the research side, combining NLP together with deep learning to improve performance of Microsoft search system.

Microsoft 4.4*
Scientifique des données et appliqué/ Data & Applied Scientist



Job Salary Company Rating Reviews Benefits

Our team is part of Microsoft AI & Research working on deep learning to power end user experiences relating to the following four areas:

- Relevance of search results on Bing.com
- Question-answering system for Bing and Cortana
- Enterprise search forsharepointand other work related content
- Recommendation system for news feed system

The team works on projects across the entire deep learning life-cycle. This includes deep learning models for language representation, language generation, ranking, summarization, smart reply, universal representation learning, reinforcement learning, question-answering, user modeling, etc. Apart from this, we also work on large-scale distributed training, improving training performance, run-time optimized inference, and other similar aspects. The team works across most of the common modeling scheme like Transformers, RNNs, CNNs, VAEs, GANs, etc. Most of these models are targeted to serve live user traffic and hence have to be optimized for serving at very tight latency constraints. We use a diverse set of hardware to serve our models including CPUs, GPUs, and FPGAs.

Task 2:

I would like to thank Professor Ruths for providing us such wonderful course experience throughout this whole semester! I am currently a first-year master of CS student. But during this four months, I always think that it would have been much better if I were a second-year undergraduate student. I guess there are already students telling you how much this course has impacted them on the job market, making them more competitive. But for me, my path is more research-oriented. I spent most of my vacations in the labs and will probably pursue a PHD afterwards. For students like me, when we first got exposed to a research project, the hardest part was not the project itself, but how to get familiar with the Unix system and how to structure the project. We only got our relevant experience when we took Comp 206 but that was apparently not enough. If I were a sophomore now, I would have gained this experience before I start my research career, which would have been much easier for both me and my future supervisor. So if it is possible, please keep teaching this course, it would mean a lot to the students who want to take part in research but have no idea where to start. Again, thank you so much for designing this great course. Hope I could TA this course someday in the future!:)