IFT 數據面試

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關於自己

Why there is a Gap between 06/2010 and 09/2013

Basically, I went to work and accumulated finical backup. Applied master degree would be the next step.

自我介紹

Hello, my name is Choi Chong Ha, and I received my bachelor's degree in mathematics from National Tsing Hua University in Taiwan, followed by my mphil degree in mathematics from the Hong Kong University of Science and Technology.

In terms of work experience, I previously worked as a clerk at the Macau University of Science and Technology's business school, where I provided administrative support and assisted event organization. I currently work at the Macao Meteorological and Geophysical Bureau, where my primary responsibilities include data analysis and data visualization by programming.

With respect to the tools, I mostly use SQL for data selection, Python for data analysis, and then PHP and JavaScript for data visualization. I took a tableau course at the start of February.

Regarding the projects I've worked on, I joined a project that described airport observatory data. It showed multiple characteristics on a monthly and hourly basis, including visibility, the height of the cloud base, and humidity. Citizens can view the reports on the SMG website.

In summary, I have a solid background in mathematics and practical experience in programming, which enables me to learn theoretic models quickly and put them into practice.

機場報告難的地方

Communication is the most difficult part. I worked with airport colleagues. They determined the rules for computing and the boundaries of ranges. As a result, I . needed to communicate what they wanted to reach and make a crompromised plan. I put into practice a program that required flexibility and achieveability.

興趣

I enjoy reading; for instance, I recently finished reading volumes 1 and 2 of "The Three-Body Problem,". Despite i studied math. science fiction is not my preferred novel style. I would rather read novels describing people emotions. "Love in the Time of Cholera" is another choise.

不是數據分析師，為什麼要考

I have data analysis experience in my current job and I found that data analysis with statistics or further machine learning would match my primary study. Furthermore, the way to find and conclude the basic principle behind data would interest me and give me a sense of achievement.

離職原因是什麼

Macao Meteorological and Geophysical Bureau focuses mainly on weather observation, and I found that data analysis with statistics or further machine learning would match my primary study. In addition, I find that joining a professional team helps me to improve my data analysis abilities.

怎樣才是一名合格的數據分析師

Being a qualified data analysis is a long-term process . There are a lot of traits would be required. First, find the valued questions that draw public attention and help decision-making for government. Second, applying academic methods to achieve the purposes required comprehensive abilities. When outcomes of analyzing data do curnot fit the expectation, finding the reasons and modifying the methods are vital. Finally, displaying results with concise articles and interactive and dynamic diagrams would be better to delivery the messages.

工作中的挑戰和應對 (成功)

My colleague contacted the vendor for the typhoon forecast products. One day, he asked me about a math/statistical algorithm that the render used to calculate the typhoon track probabilities. I tried to explain the professional terms, such as integral and 1-sigma for 70 percent, to him. Furthermore, my colleagues discovered that the outcome differs from that of the ECMWF, an authoritative organization in numerical forecasting. I was interested in those problems and found information from the Hong Kong Observatory's YouTube channel, and I succeeded in following the algorithm introduced to generate the typhoon track probabilities map similar to ECMWF.

工作中的挑戰和應對 (失敗)

This job's first mission was to build up a weather numerical model and merge obserative data into models, named LAPS. Rare information can be found online. I could only read the code from the model and found the rules how to create suitable formatted data and inject into the model. However, after several months, Laps announced that it would not be updated anymore. As a result, predicted the trendcy in industry is curcial, and understanding the fundamental principles would aid in problem solving.

Data analysis project

I joined a project that aimed to describe airport observatory data that described multiple elements such as humidity , temperature and the height of cloud base. Citizens can view the reports on the SMG website. First, I mainly select data from databases by using SQL. Second, I clean up the null and useless data and organize it from month to month, hour to hour, and various value ranges by programming. Finally, I applied the Python library to create a formatted table on PDF.

最大的優勢

I love studying and challenges. Encountering new challenges would push me to think outside the box and more creative, new ideas and methods will be found in the processing in order to tackle them.

最大的劣勢

I am not skill in sports. However, during the previous three years, the COVID-19 epidemic's effects made me realize how important health is. Physical fitness is the best defense, so I started jogging.

I would rather reading than speaking. I like stay alone and as a result i have less communication with others. I still recognized that the importance of team-work , therefore, i would share my difficults or outcomes in time.

Where do you see yourself in five years?

我希望在數據分析上有所發展, 我有結實的數學基礎和有寫程序的經驗, 現在還在不斷學習編程技和機器學習的理論, 相信將來會有很好的實踐

I see my long-term career in data analysis. I have a strong background in math and now working at programming. Moreover, I plan to study new programming techinques and theories of machine learning. I'm sure I'll have a successful practice in the future.

What are your career aspirations?

How do you prioritize your work?

對應聘的公司的了解

您認為我們公司有哪些尚待改進的地方嗎？

I mainly learn about the mission on websites. I found that the website was designed like a newspaper or academic report. The majority of the content is described in text rather than in clearly dynamic graphs showing important indexes, as on the websites of the Macau Government Tourism Office and the Statistics and Census Service. However, if the site visitors include the general public, the websites from the Statistics and Census Service are more attractive.

Why do you want to work at this company?

There are three points why I want to work at IFT.

First, I saw MTSI and other useful indexes on ITRC, and there are many dynamic graphs showing various comparisons, which is my field. I am able to build a website and i have my own blog.

Second, MTSI study is adopted from the American Customer Satisfaction Index (ACSI). Appling thesis and recreating in macau version is inspiring.

Finally, there is a new graph on the MTSI website that describes the joint matrix of sector TSI and its relative contribution to overall MTSI. This implies the project is steadily improving, which encourages me to join.

有甚麼問題

I found that MHRM is related to human resources instead of focusing on tourism. Hence, is there room to study topics other than tourism?

我去註冊帳號為了可以看TCC的報告，但最新的卻是2015年，請問是否最近這幾年的報近如2019年都沒有。 I attempted to create an account to view the TCC report, but the most recent is from 2015. Was the TCC project suspended?.

可改善的地方

最近幾年的報告都是DASHBOARD, 可否追加這幾年的可下載的文本報告。 The reports of the last few years are all in dashboard format; it is great that we can find and review the downloadable PDF reports of these years.

The reports of the last few years are all in dashboard format; will you consider adding the downloadable PDF reports of these years?

對我們公司有甚麼了解

itrc ITRC is the policy research and industry development unit of the Macao Institute for Tourism Studies (IFTM). The Centre serves as a management and public policy think-tank and a knowledge provider for tourism and hospitality related research.

Our activities include conducting policy studies, monitoring and evaluation studies, research design and opinion surveys, reporting of research findings, as well as organizing seminars.

There are four indexes posted online. The First is Macau Tourism Carrying Capacity Study(TCC)

the Institute combined studies on "social and psychological carrying capacity" and "physical capacity of tourism facilities" in the research, to attempt at estimating the optimal tourism carrying capacity of Macao.

- link

The Second is Macau Tourist Satisfaction Index(MTSI)

The MTSI measures visitors' satisfaction across 10 tourism related sectors. This includes hotels, restaurants, transportation, heritage attractions, non-heritage attractions, retail shops, public services (e.g. customs and immigration), events,tour operators and guides, and gaming. An overall satisfaction index (or TSI) for the tourism industry in Macao is then estimated based on the sectoral results.

The third is Macau Visitor Profile Survey (VPS)

The VPS is a year-round survey that studies the the trip characteristics, purpose of visit, source of gaining travel information, travel arrangement and activity, spending behaviour, length of stay, source market, etc. of the visitors.

The forth is Macao Humoan Resource Monitor Survey (MHRM)

There are 4 key variables monitored by the MHRM project over time. These are perceived fairness of compensation and benefits, general job satisfaction, job stress and intent to stay at organizations. All 4 variables are measured along a 5-point Likert scale ranged from 1 (lowest) to 5 (highest). The job changing characteristics include average job tenure and main reasons of changing jobs.

論述你想做的Project

- macau daily news 市民對中國農歷新年新馬路任我行計劃 滿意度高, 旅遊局亦透露會將此計劃恒常化。 特此可考慮這個方向做一個調查。從不同的角度出發, 如遊客、市民(特別是附近居住的市民)和運輸行業

的工作人員,可收集不同的意見如下：

- 舉辦前

1. 舉辦地點
2. 舉辦頻率
3. 舉辦時間
4. the lack of emergency lanes and other safety-related issues
5. the government to develop a contingency plan that includes evacuation routes and signage to ensure the safety of residents and tourists.
6.

可以將舉辦前的結果，與旅遊局不同景點的人客量作加權分析，取得舉辦的地點，時間和頻率

- 舉辦後

1. 舉辦帶來的人流量, 包括機票, 船票等銷售量
2. 舉辦帶來各行業的盈利
3. 對交通、安全、事後垃圾處理/街道清潔等的滿意度(如同TCC)
4. 與同個景點，不同季度，不同景點，相同季度的比較

The public is satisfied with the Chinese Lunar New Year New Road Project, MGTO also revealed that the project will be permanent. Therefore, we can consider this direction to do a survey. From different perspectives, such as tourists, dislocation of the residents and transportation industry workers, different opinions can be collected as follows.

應聘的專業知識-統計

中心极限定理，大数定律

特征值和特征向量的定义

概率和似然的分別

第一類錯誤和第二類錯誤分別

數據分析思維

link

對未來數據分析方向的發展思維和想法

數據預處理

link

迴歸分析

- link

一些統計學名詞解釋

link

應聘的專業知識-項目管理

應聘的專業知識-人際溝通

新聞

旅遊局客流預測

- link

新的旅遊政策

- Macau Daily Week
- 新聞局

Around mid to late February, the Office will reactivate the "Experience Macao, Unlimited" Caravan Roadshow Series across the Greater Bay Area in the rest of the cities including Guangzhou, Jiangmen and Shenzhen. Macao Weeks are also planned to unfold this year.

The MGTO is gearing up for physical promotional activities in international markets, including roadshows, presentation seminars, and familiarization trips in preparation for the return of international tourism.

the MGTO will follow a strategy based on the Southeast Asian countries that have direct flights to Macau to promote an airfare-based subsidy to attract visitors from those countries.

新馬路任我行

力報

新聞局

Macau News

Macau Daily Week

The Government's "Strolling Through Almeida Ribeiro – Pilot Project for a Pedestrian Area"

"San Ma Lo Pedestrian Area Pilot Project"

旅遊團抵澳

- Macau Daily News

The long-awaited resumption of mainland tour groups has commenced, with the city welcoming a total of 135 tourists Monday, divided into six tour groups.

澳大經濟預測2023

- Macau Daily News

復

link

1. 減免稅務及規費，以減輕企業及居民負擔；
2. 推行中小微企援助及息補貼，以扶持企業存續；
3. 加強民生措施，支援弱勢家庭；
4. 提升技能培訓、實施以工代賑、帶津培訓；
5. 推出電子消費券，

幾乎全部於外出時或在有人的地方戴口罩（96.5%）；比平時多洗手（91.5%）、多清潔消毒家居或工作場所（76.7%）；全部取消或部份取消團體活動或聚會（97.5%）；減少外出（92.7%）。

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