



# PORTFOLIO

김영훈 YOUNGHOON KIM

# About me

안녕하세요, 김영훈입니다.

저는 회계팀에서 3년 5개월 동안 재무데이터를 다루었고, 이후 KT프로젝트에서  
언어데이터 수집 업무를 2년 4개월간 수행하였습니다.

대학원에서 인공지능학을 전공하여, Python을 활용한 인공지능 알고리즘 및 데이터  
분석 기술을 익혔습니다. 또한 개인적인 스터디 활동으로 정교한 데이터 분석 및  
인사이트 도출을 위해 SQL 기술을 익혔습니다.

여러 가지 도구를 활용한 데이터 분석으로 비즈니스적 의사결정에 필요한 인사이트를  
제공하도록 하겠습니다.



**송실대학교 정보과학대학원 인공지능학 석사**  
2023년 졸업

- 졸업 논문 : 보다 자연스러운 AI Contact Center 기획을 위한 개선 방안 연구
- 학점 : 4.39 / 4.5

**한국외국어대학교 경제학과 학사**  
2013년 졸업

- 부전공 : 경영학
- 학점 : 3.40 / 4.5



# Job Experience

## 디플렉스씨앤씨

프리랜서 2023.07 ~ 2023.12(5개월)

- KT NH투자증권 음성자산화 사업
- 텍스트 분석(TA, Text Analysis)  
엔진 데이터 구축 업무
- 성과 : 추출율 89% → 94%

## 에스맨파워

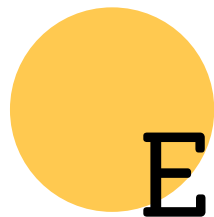
파견직 2021.08 ~ 2023.07(1년 11개월)

- KT AICC B2B / B2G 구독형 서비스
- 언어모델(LM, Language Model)  
데이터 고도화 업무
- 성과 : 토픽 인식률 75% → 97%

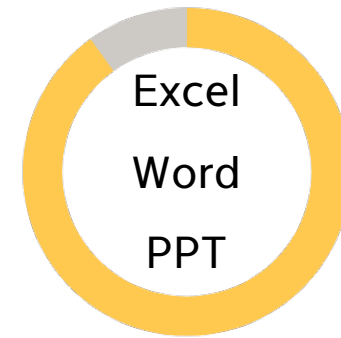
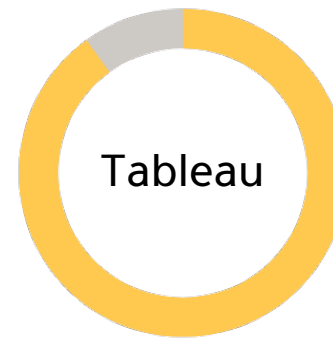
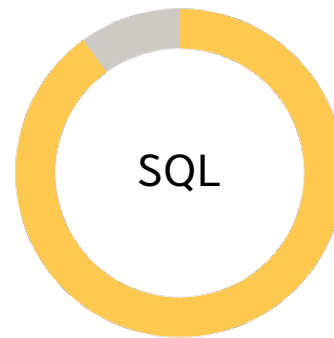
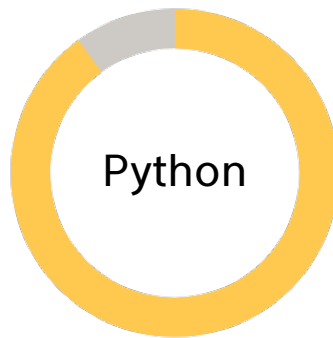
## CJ바이오사이언스(천랩)

대리 2017.11 ~ 2021.03 (3년 5개월)

- 재무데이터 분석
- 분기/반기/연 회계결산 업무
- 성과 : IPO 심사 통과



# Expertise Skill



Project-SQL  
Store Sales Data  
from Kaggle

# Store Sales Data

1. 목적 : 인도의 마하라슈트라 주의 판매 데이터 분석을 통하여 향후 비즈니스를 집중해야 할 지역과 상품 파악
2. 데이터셋 : Kaggle의 Store Sales Data
3. url :  
<https://www.kaggle.com/datasets/varunraskar/store-sales-data>
4. 파일 : SKU MASTER.csv, Saels.csv
5. 방법 : SQL 코드로 프로젝트 목적에 맞는 도시, 카테고리, 상품 관련 매출 데이터 추출



# Store Sales Data

## Data set

<Sales.csv>

1. Date : 판매날짜, 2023년 1월 자료
2. SKU : 상품ID
3. Product Name : 상품명
4. City : 판매 도시
5. Sales : 판매량

<SKU\_MASTER.csv>

1. SKU : 상품ID
2. Description : 상품명
3. Category : 상품 분류
4. Price : 상품 가격



# Store Sales Data – EDA

## 1. 매출이 높은 도시

<코드>

```
select rank() over(order by sum(s.Sales * sm.Price) desc) as 'rank',  
       s.City,  
       sum(s.Sales * sm.Price) as Total  
  from storesalesdata.Sales s  
     join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU  
 group by s.City  
 order by Total desc;
```

<결과>

123 rank ▼	ABC City ▼	123 Total ▼
1	Mumbai	245,068,996
2	Pune	168,724,078
3	Nasik	158,115,125
4	Aurangabad	134,184,287

Mumbai 도시가 가장 매출이 높다

# Store Sales Data – EDA

## 2. 매출이 높은 카테고리

<코드>

```
select rank() over (order by sum(s.Sales * sm.Price) desc) as 'rank',  
       Category,  
       sum(s.Sales * sm.Price) as amount  
  from storesalesdata.Sales s  
   join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU  
 group by sm.Category  
 order by amount desc;
```

<결과>

123 rank	ABC Category	123 amount
1	Mobiles	256,805,650
2	Gifting	80,165,736
3	Pet Supplies	74,374,725
4	Fashion	68,465,930
5	Sports / Fitness	65,977,110
6	Kitchen	48,325,236
7	Video Games	38,307,179
8	Household	27,109,444
9	Medicines/Healthcare	26,376,260
10	Books	20,185,216

Mobiles의 매출이 높다

# Store Sales Data – EDA

## 3. 매출이 높은 상품, 카테고리, 판매량, 가격

<코드>

```
select rank() over(order by sum(s.Sales * sm.Price) desc) as 'rank',
       s.`Product Name`,
       Category,
       sum(s.Sales * sm.Price) as amount,
       sum(sales),
       Price
from storesalesdata.Sales s
  join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU
group by s.`Product Name`, Category
order by amount desc;
```

<결과>

rank	Product Name	Category	amount	sum(sales)	Price
1	Hotorola	Mobiles	83,081,500	1,867	44,500
2	2plus	Mobiles	58,979,700	1,846	31,950
3	Samson	Mobiles	48,247,500	1,838	26,250
4	Jhaomi	Mobiles	44,590,500	1,835	24,300
5	Matty Dog Bed	Pet Supplies	39,496,443	4,907	8,049
6	Bucchi	Fashion	35,784,000	4,260	8,400
7	Mr.Clean Dishwasher	Kitchen	29,510,376	1,959	15,064
8	Friends Dinner Set	Gifting	29,041,740	5,319	5,460
9	Exact Flower Vase	Gifting	24,364,200	5,801	4,200
10	Mokia	Mobiles	21,906,450	1,803	12,150

<possible task> Mobile 상품 중에서 Hotorola, 2plus, Samson, Jihaomi를 생산하는 회사들과 커넥션을 잘 유지하여, 이후 출시 상품들의 재고 확보와 판매에 집중

# Store Sales Data – EDA

## 4. 판매량이 높은 상품, 카테고리, 가격

<코드>

```
select s.`Product Name`, sm.Category, sum(s.Sales) as amount_sales, sm.Price,
       sum(s.Sales * sm.Price) as Total_Sales,
       rank() over(order by sum(s.Sales * sm.Price) desc) as 'Rank'
from storesalesdata.Sales s
join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU
group by s.`Product Name`
order by amount_sales desc;
```

<결과>

	ABC Product Name	ABC Category	123 amount_sales	123 Price	123 Total_Sales	123 Rank
1	Blessing Atta 10kg pack	Household	10,681	428	4,571,468	35
2	Tata Yellow Label	Household	9,570	672	6,431,040	28
3	Amazing CornFlakes	Household	9,416	216	2,033,856	45
4	Handmade Basmati Rice	Household	9,296	880	8,180,480	25
5	Descafe Gold Blend coffee	Household	8,540	690	5,892,600	31
6	Nario	Video Games	6,084	627	3,814,668	38
7	HIFA 2023	Video Games	5,866	2,247	13,180,902	17
8	Family Cake and Card Combo	Gifting	5,814	1,130	6,569,820	26
9	Exact Flower Vase	Gifting	5,801	4,200	24,364,200	9
10	Pacman	Video Games	5,796	110	637,560	50

판매량이 기준으로 높은 상품군은 Household, Video Games, Gifting인데, 가격이 상대적으로 높지 않아 전체적인 매출 비중은 낮은 편이다.(매출 전체 순위 Rank가 50위 중 대부분 하위권)

# Store Sales Data – EDA

## 5. 상품별/카테고리별 도시 매출 순위

<코드>

```
with t1 as (select s.`Product Name`, Category, city, sum(s.Sales * sm.Price) as amount, sum(sales), Price
            from storesalesdata.Sales s
            join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU
            group by s.`Product Name`, Category, city
            order by amount desc),
t2 as (select `Product Name`, Category, sum(amount) as Total_amount
        from t1
        group by t1.`Product Name`, t1.Category)
select concat(t1.`Product Name`, '_', t1.Category) as ProductName_Category, t1.city, amount, Total_amount
       from t1 join t2 on t1.`Product Name` = t2.`Product Name` and t1.category = t2.Category
       order by Total_amount desc, ProductName_Category desc, amount desc;
```

# Store Sales Data – EDA

## 5. 상품별/카테고리별 도시 매출 순위

<결과>

	ABC ProductName_Category	ABC city	123 amount	123 Total_amount		ABC ProductName_Category	ABC city	123 amount	123 Total_amount
1	Hotorla_Mobiles	Mumbai	28,435,500	83,081,500	11	Samson_Mobiles	Nasik	10,841,250	48,247,500
2	Hotorla_Mobiles	Pune	20,069,500	83,081,500	12	Samson_Mobiles	Pune	10,788,750	48,247,500
3	Hotorla_Mobiles	Aurangabad	17,444,000	83,081,500	13	Jhaomi_Mobiles	Mumbai	14,361,300	44,590,500
4	Hotorla_Mobiles	Nasik	17,132,500	83,081,500	14	Jhaomi_Mobiles	Pune	12,563,100	44,590,500
5	2plus_Mobiles	Mumbai	19,457,550	58,979,700	15	Jhaomi_Mobiles	Aurangabad	9,136,800	44,590,500
6	2plus_Mobiles	Pune	14,856,750	58,979,700	16	Jhaomi_Mobiles	Nasik	8,529,300	44,590,500
7	2plus_Mobiles	Aurangabad	13,003,650	58,979,700	17	Matty Dog Bed_Pet Supplies	Mumbai	14,407,710	39,496,443
8	2plus_Mobiles	Nasik	11,661,750	58,979,700	18	Matty Dog Bed_Pet Supplies	Pune	11,139,816	39,496,443
9	Samson_Mobiles	Mumbai	15,015,000	48,247,500	19	Matty Dog Bed_Pet Supplies	Nasik	8,660,724	39,496,443
10	Samson_Mobiles	Aurangabad	11,602,500	48,247,500	20	Matty Dog Bed_Pet Supplies	Aurangabad	5,288,193	39,496,443

Mobiles 중 Hotorla, 2plus, Jhaomi 상품은 **Mumbai**, Pune에서 많이 팔렸고,  
Samson 상품은 **Mumbai**, Aurangabad에서 많이 팔렸다.

<possible task>

Mumbai 도시의 Mobiles 매출이 높은 요인을 파악해본다.



# Store Sales Data – EDA

## 6. 도시별/카테고리별 상품 매출 순위

<코드>

```
with t1 as (select city, sum(Sales*Price) as City_amount
            from storesalesdata.Sales s
            join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU
            group by city
            order by City_amount desc),
t2 as (select s.SKU, `Product Name`, City, Sales, Category, Price
      from storesalesdata.Sales s
      join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU),
t3 as (select t2.City, t2.Category, sum(t2.Sales * t2.Price) as Category_amount, City_amount
      from t1
      join t2 on t1.city = t2.city
      group by t2.city, t2.Category
      order by City_amount desc, Category_amount desc)
select t2.city, t2.category, t2.`Product Name`, sum(t2.Sales * t2.Price) as Product_amount, Category_amount, City_amount
      from t2
      join t3 on t2.city = t3.city and t2.category = t3.category
      group by t2.city, t2.category, t2.`Product Name`
      order by City_amount desc, Category_amount desc, Product_amount desc;
```

# Store Sales Data – EDA

## 6. 도시별/카테고리별 상품 매출 순위

<결과>

	ABC City ▼	ABC Category ▼	ABC Product Name ▼	123 Product_amount ▼	123 Category_amount ▼	123 City_amount ▼
1	Mumbai	Mobiles	Hotorola	28,435,500	84,073,350	245,068,996
2	Mumbai	Mobiles	2plus	19,457,550	84,073,350	245,068,996
3	Mumbai	Mobiles	Samson	15,015,000	84,073,350	245,068,996
4	Mumbai	Mobiles	Jhaomi	14,361,300	84,073,350	245,068,996
5	Mumbai	Mobiles	Mokia	6,804,000	84,073,350	245,068,996
6	Mumbai	Gifting	Friends Dinner Set	12,639,900	34,197,590	245,068,996
7	Mumbai	Gifting	Exact Flower Vase	10,903,200	34,197,590	245,068,996
8	Mumbai	Gifting	Desi Kurti	4,698,000	34,197,590	245,068,996
9	Mumbai	Gifting	Family Cake and Card Combo	3,011,450	34,197,590	245,068,996
10	Mumbai	Gifting	Crafting Chandlar	2,945,040	34,197,590	245,068,996
	ABC City ▼	ABC Category ▼	ABC Product Name ▼	123 Product_amount ▼	123 Category_amount ▼	123 City_amount ▼
51	Pune	Mobiles	Hotorola	20,069,500	63,490,450	168,724,078
52	Pune	Mobiles	2plus	14,856,750	63,490,450	168,724,078
53	Pune	Mobiles	Jhaomi	12,563,100	63,490,450	168,724,078
54	Pune	Mobiles	Samson	10,788,750	63,490,450	168,724,078
55	Pune	Mobiles	Mokia	5,212,350	63,490,450	168,724,078
56	Pune	Pet Supplies	Matty Dog Bed	11,139,816	20,926,506	168,724,078
57	Pune	Pet Supplies	Reflective Dog RainCoat	4,342,400	20,926,506	168,724,078
58	Pune	Pet Supplies	Podigree Dog Food	2,101,652	20,926,506	168,724,078
59	Pune	Pet Supplies	Park Range Pet Shampoo	1,801,046	20,926,506	168,724,078
60	Pune	Pet Supplies	Old Mint Pet Shampoos	1,541,592	20,926,506	168,724,078



# Store Sales Data – EDA

## 6. 도시별/카테고리별 상품 매출 순위

<결과>

	ABC City ▼	ABC Category ▼	ABC Product Name ▼	123 Product_amount ▼	123 Category_amount ▼	123 City_amount ▼
101	Nasik	Mobiles	Hotorola	17,132,500	52,028,500	158,115,125
102	Nasik	Mobiles	2plus	11,661,750	52,028,500	158,115,125
103	Nasik	Mobiles	Samson	10,841,250	52,028,500	158,115,125
104	Nasik	Mobiles	Jhaomi	8,529,300	52,028,500	158,115,125
105	Nasik	Mobiles	Mokia	3,863,700	52,028,500	158,115,125
106	Nasik	Fashion	Bucchi	10,987,200	22,149,601	158,115,125
107	Nasik	Fashion	Lucy Phillepe	3,779,776	22,149,601	158,115,125
108	Nasik	Fashion	Allen Dolly	3,528,900	22,149,601	158,115,125
109	Nasik	Fashion	Badlands	2,241,765	22,149,601	158,115,125
110	Nasik	Fashion	Prateek England	1,611,960	22,149,601	158,115,125
	ABC City ▼	ABC Category ▼	ABC Product Name ▼	123 Product_amount ▼	123 Category_amount ▼	123 City_amount ▼
151	Aurangabad	Mobiles	Hotorola	17,444,000	57,213,350	134,184,287
152	Aurangabad	Mobiles	2plus	13,003,650	57,213,350	134,184,287
153	Aurangabad	Mobiles	Samson	11,602,500	57,213,350	134,184,287
154	Aurangabad	Mobiles	Jhaomi	9,136,800	57,213,350	134,184,287
155	Aurangabad	Mobiles	Mokia	6,026,400	57,213,350	134,184,287
156	Aurangabad	Sports / Fitness	Rural Terrain Cycles	4,375,680	15,235,944	134,184,287
157	Aurangabad	Sports / Fitness	Rocky Gym Set	4,221,000	15,235,944	134,184,287
158	Aurangabad	Sports / Fitness	Monex Badminton Rackets	3,938,700	15,235,944	134,184,287
159	Aurangabad	Sports / Fitness	Abibas Football	2,157,450	15,235,944	134,184,287
160	Aurangabad	Sports / Fitness	Yoga Mattress	543,114	15,235,944	134,184,287

# Store Sales Data – EDA

## 6. 도시별/카테고리별 상품 매출 순위

<결과> 도시별 판매 주력 상품

1. Mumbai는 Mobiles/Gifting 카테고리 매출이 높은 편이고, Mobiles은 Hotorola, 2plus / Gifting은 Friends Dinner Set, Exact Flower Vase 상품의 매출이 높다.
2. Pune은 Mobiles/Pet Supplies 카테고리 매출이 높은 편이고, Mobiles은 Hotorola, 2plus / Pet Supplies는 Matty Dog Bed, Reflective Dog RainCoat 상품의 매출이 높다.
3. Nasik은 Mobiles/Fashion 카테고리 매출이 높은 편이고, Mobiles은 Hotorola, 2plus / Fashion은 Bucchi, Lucy Phillepe 상품의 매출이 높다.
4. Aurangabad는 Mobiles/Sports&Fitness 카테고리 매출이 높은 편이고, Mobiles은 Hotorola, 2plus / Sports&Fitness는 Rural Terrain Cycles, Rocky Gym Set 상품의 매출이 높다.

<possible task>

→ 인도 마하라슈트라 주에서 유독 Moblies 카테고리의 Hotorola, 2plus 상품이 인기가 많은 이유를 알아본다.

# Store Sales Data – EDA

7. 매출이 5,000,000 미만, 판매량 2,000 미만인 상품, 카테고리

<코드>

```
select s.`Product Name`, Category, sum(sales*price) as Product_amount, sum(sales) as Sales_amount, price
from storesalesdata.Sales s
join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU
group by s.`Product Name`, Category
having Product_amount < 5000000 and Sales_amount < 2000
order by Product_amount desc ;
```

<결과>

	ABC Product Name ▼	ABC Category ▼	123 Product_amount ▼	123 Sales_amount ▼	123 price ▼
1	Screw Activity Watch	Medicines/Healthcare	3,096,240	1,940	1,596
2	Pyllum Trimmers	Medicines/Healthcare	2,582,151	1,389	1,859
3	Softcare Electric Toothbrush	Medicines/Healthcare	2,322,320	1,508	1,540
4	NoFat Weighing Scale	Medicines/Healthcare	1,400,379	1,731	809

# Store Sales Data – EDA

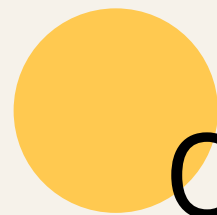
7. 매출이 5,000,000 미만, 판매량 2,000 미만인 상품, 카테고리

<코드>

```
select s.`Product Name`, Category, sum(sales*price) as Product_amount, sum(sales) as Sales_amount, price
from storesalesdata.Sales s
join storesalesdata.SKU_MASTER sm on s.SKU = sm.SKU
group by s.`Product Name`, Category
having Product_amount < 5000000 and Sales_amount < 2000
order by Product_amount desc ;
```

<결과>

	ABC Product Name ▼	ABC Category ▼	123 Product_amount ▼	123 Sales_amount ▼	123 price ▼
1	Screw Activity Watch	Medicines/Healthcare	3,096,240	1,940	1,596
2	Pyllum Trimmers	Medicines/Healthcare	2,582,151	1,389	1,859
3	Softcare Electric Toothbrush	Medicines/Healthcare	2,322,320	1,508	1,540
4	NoFat Weighing Scale	Medicines/Healthcare	1,400,379	1,731	809



# Contact.



+82-10-9004-6355



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<https://github.com/realhoon>



6, Magok Joong-ang 5 ro, GangSeo-gu, Seoul

Thank you

감사합니다