What industry do you want to work for?

trying to find out which industry is growing,
based on PR News

Oct 2018

Jiwon, Cha

PR(Public Relations)

- Using the news or business press to carry positive stories about your company or your products; cultivating a good relationship with local press representatives.

18 SEP, 2018, 03:00 BST

Jupiter Chain and Deloitte collaborate to deliver secure blockchain-driven data exchange platform for the Southeast Asia market

Singapore-based Jupiter Chain and Deloitte announced today a strategic collaboration to implement in Southeast Asia an innovative data exchange...
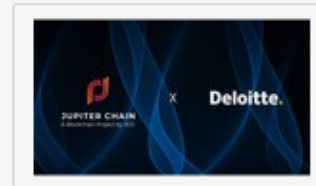
17 SEP, 2018, 14:35 BST

TokenMarket Opens New Security Token Offering Service

TokenMarket, Gibraltar and London based token sale advisory firm, is pleased to announce the launch of its new Security Token Offering (STO)...
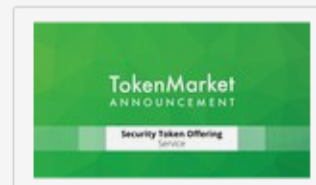
Basic Idea

- The more, The better
- Growing industries publishes more PR News.

More PR News

Less PR News

Web scraping

- http://www.prnewswire.co.uk

177 Industries

95459 news

From April to October – 2018

34Mb (News Title only)

Industry	News Title	Release Date
Blockchain	Millicom Announces...	10/11/2018 13:00:00
Chemical	...	...
Blockchain	...	...
Mining	...	...

PR News Count

```
df_group = df.groupby('level3').size().sort_values(ascending=True)
```
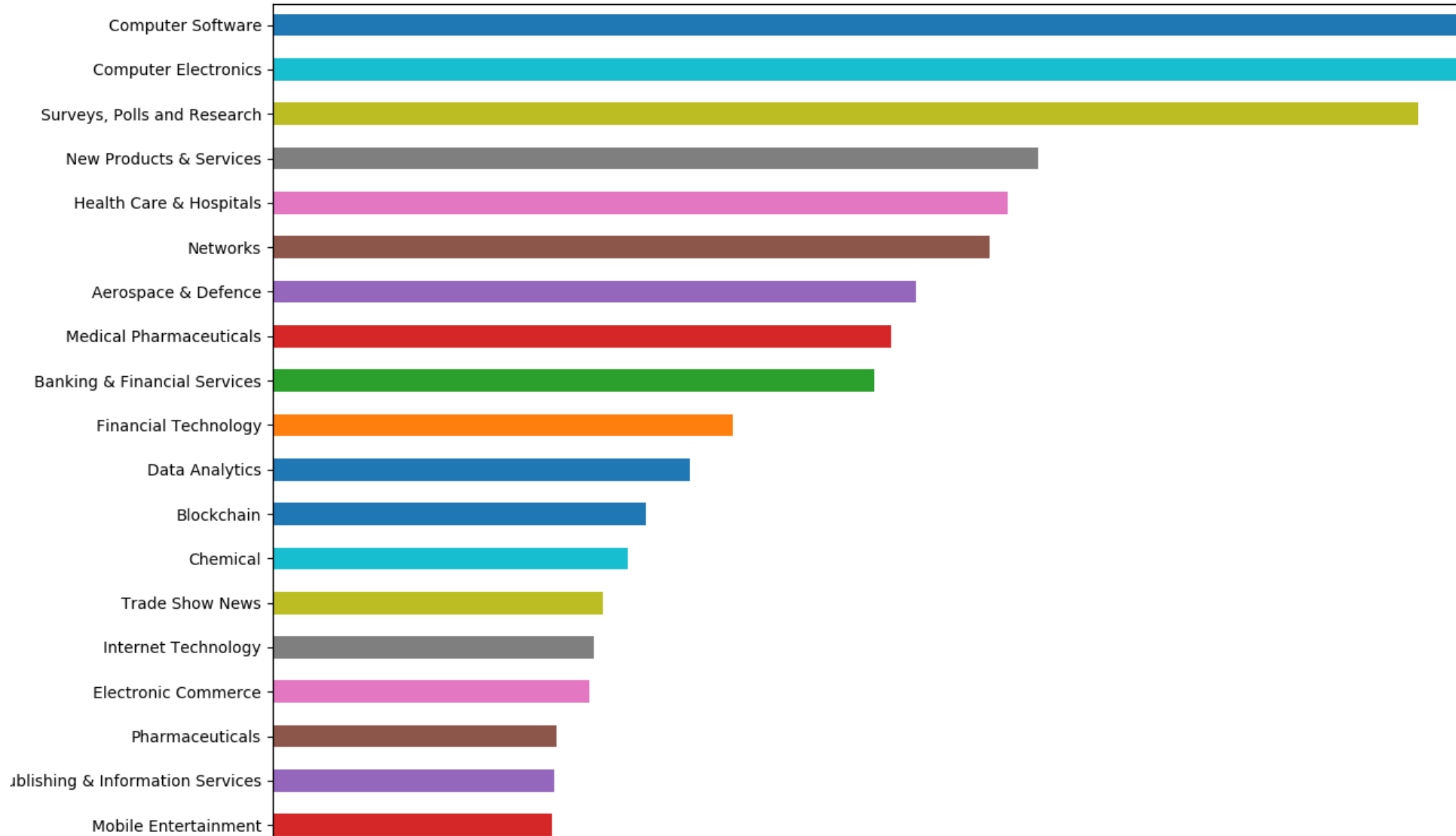
Industry

PR News count per industries
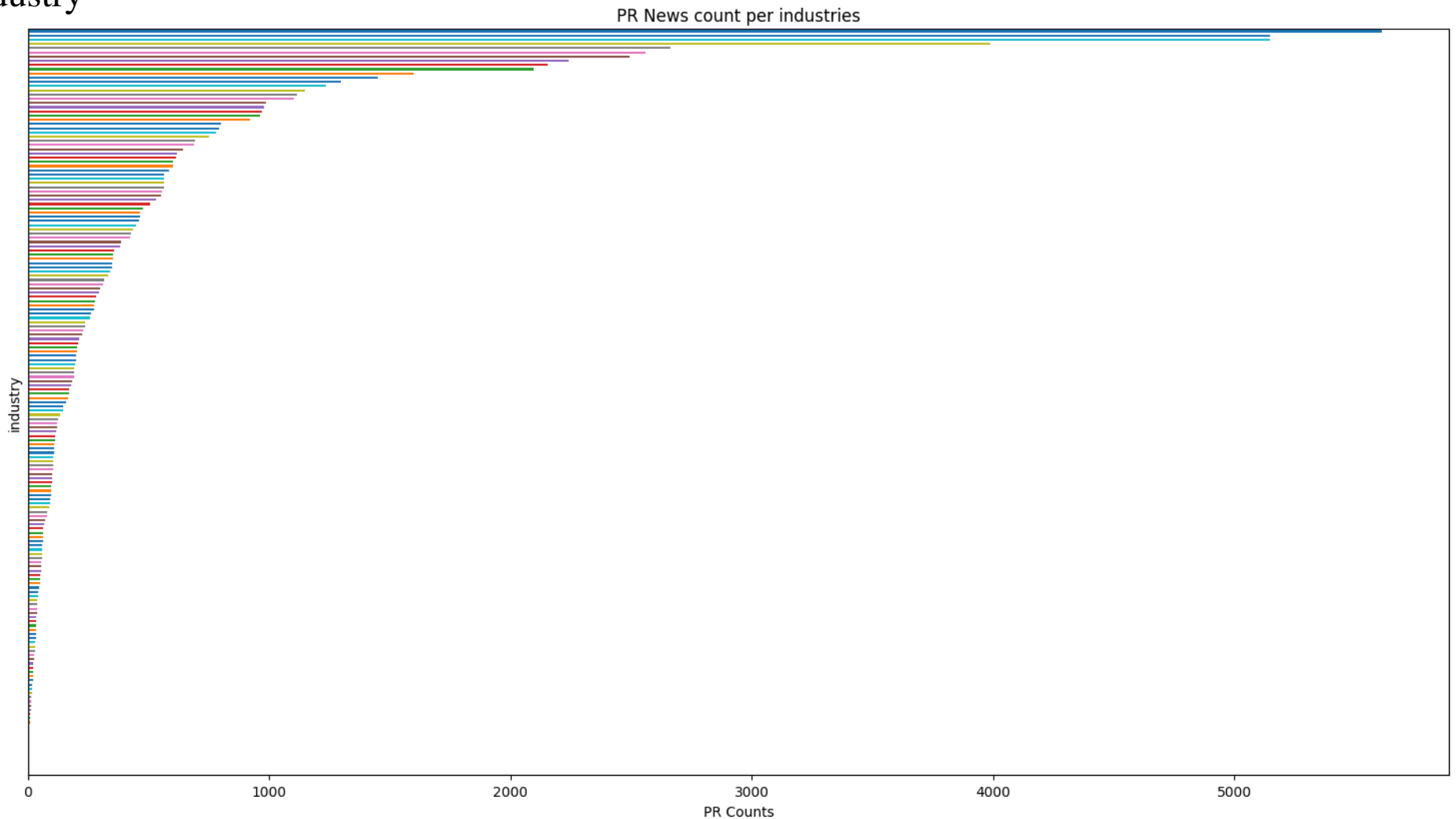
Number of PR

Top

PR News count per industries

Industry
Computer Software
Computer Electronics
Surveys, Polls and Research
New Products & Services
Health Care & Hospitals
Networks
Aerospace & Defence
Medical Pharmaceuticals
Banking & Financial Services
Financial Technology
Data Analytics
Blockchain
Chemical
Trade Show News
Internet Technology
Electronic Commerce
Pharmaceuticals
Publishing & Information Services
Mobile Entertainment

Bottom

PR News count per industries

- Outdoors, Camping & Hiking
- Public Safety
- Magazines
- Infection Control
- Furniture and Furnishings
- Mental Health
- Books
- Small Business Services
- Jewelry
- Sales Reports
- Office Products
- Earnings Forecasts & Projections
- FDA Approval
- Supermarkets
- European Government
- and Intermodal Transportation
- Dividends
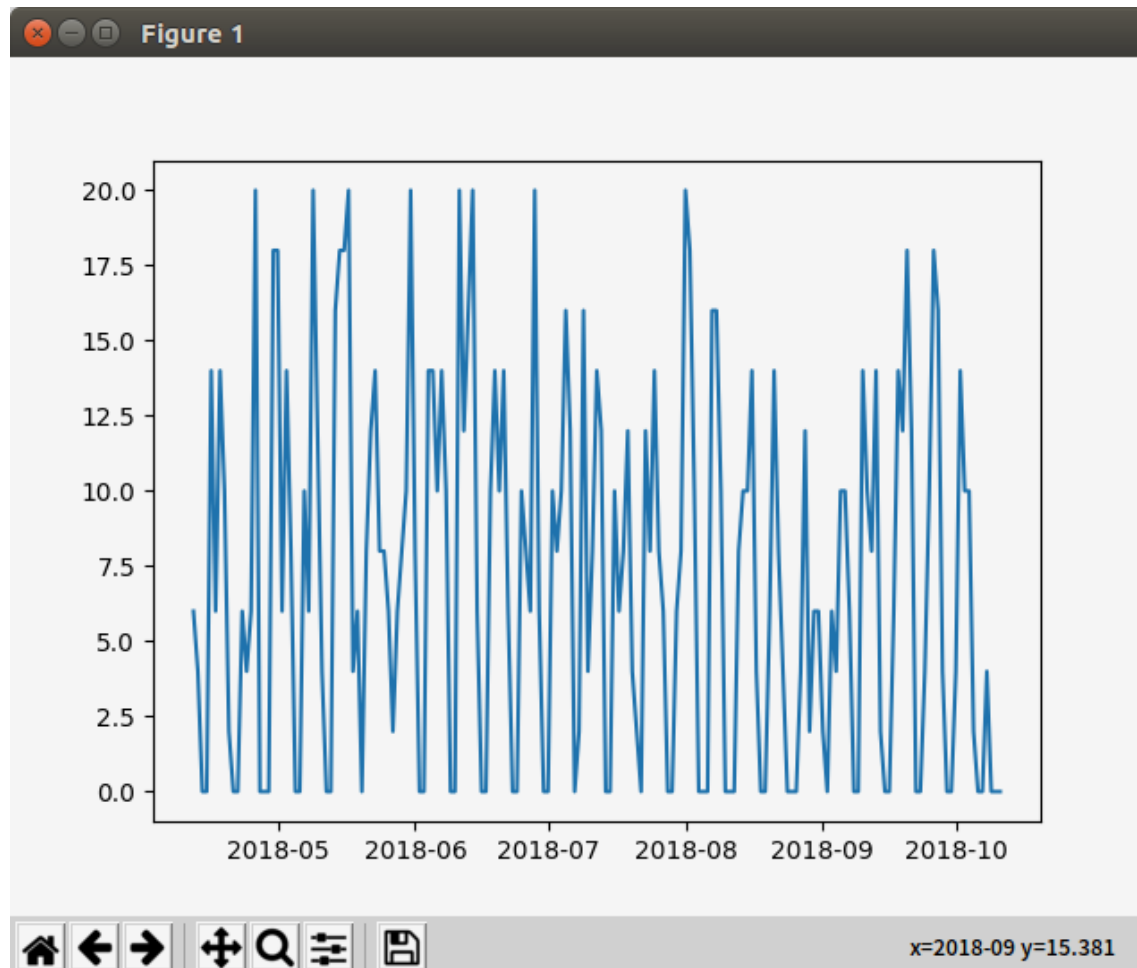- Animal Welfare

Lets find trend for each industry.

```python
time_df = df.groupby(['release_date', 'level3']).size().unstack().fillna(0)
time_df = time_df.resample('D').sum()
```


Plot for Blockchain Industry

Nature of PR news...

```python
df['day_of_week'] = df['release_date'].dt.weekday_name
df.groupby('day_of_week').size()
```

```
"""
day_of_week
Friday      9370
Monday      14824
Saturday      590
Sunday        711
Thursday    17890
Tuesday     18448
Wednesday   17126
"""
```
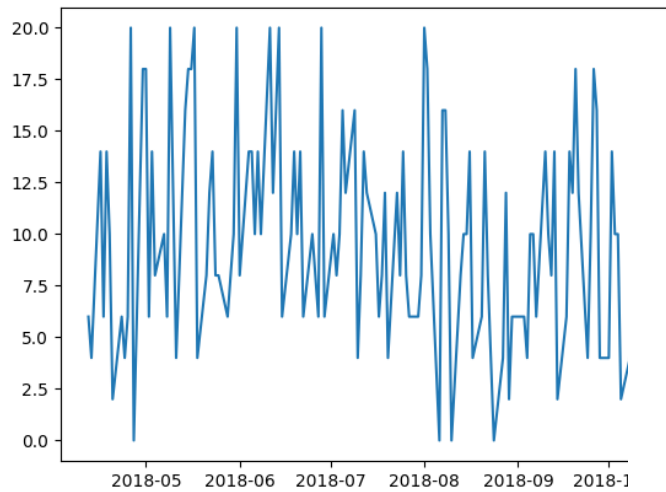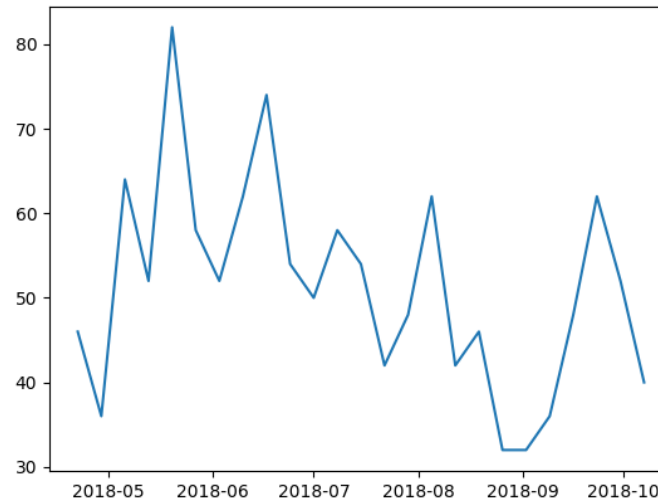
Can you see the trend?


```
time_df[time_df.index.dayofweek < 5]
```
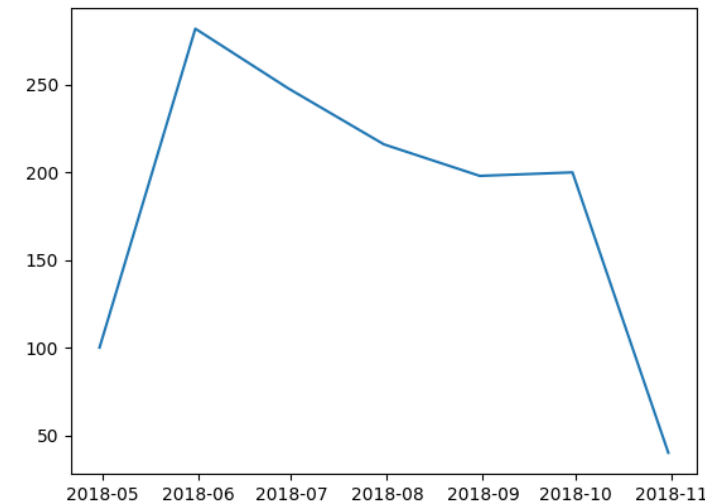
Removed weekends

```
time_df.resample('W').sum()
```

Resampled (weekly)

```
time_df.resample('M').sum()
```
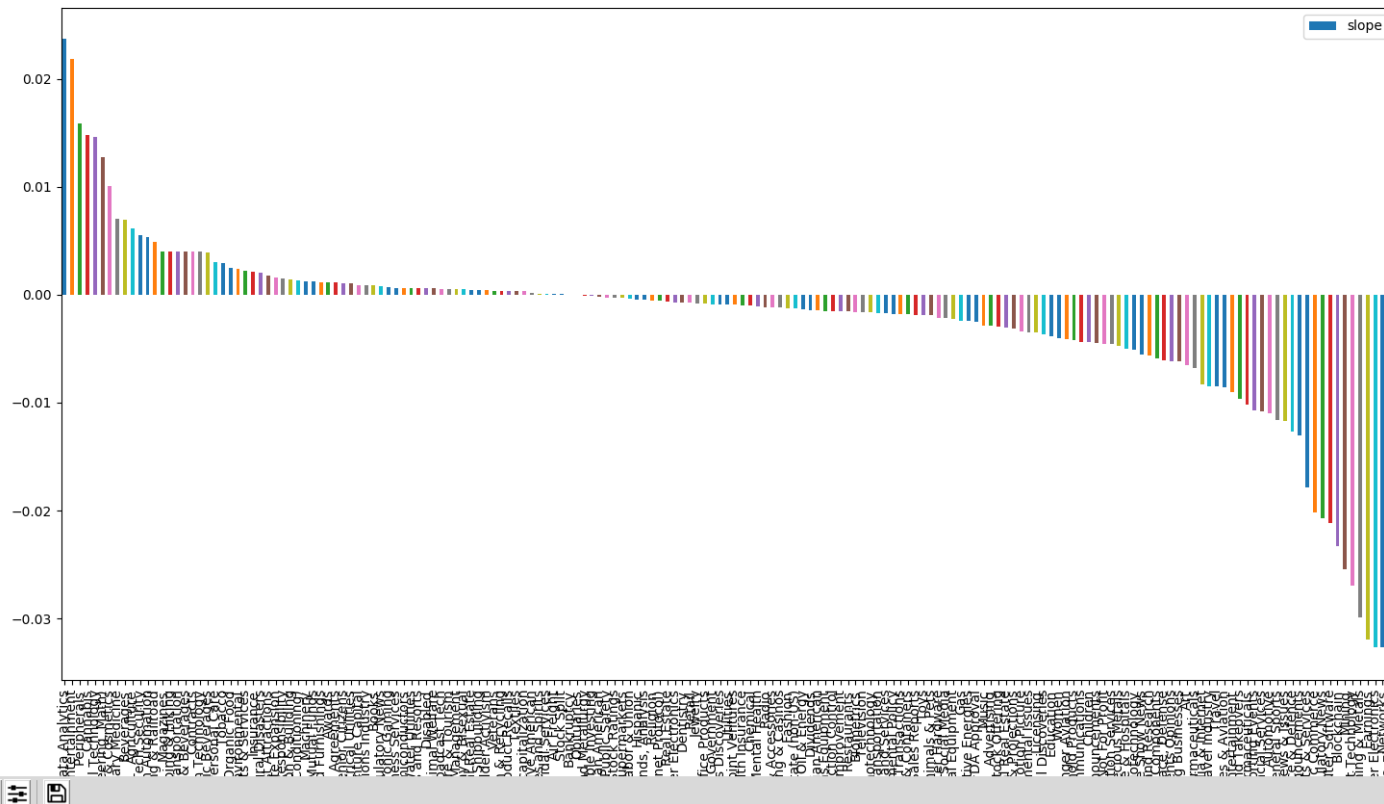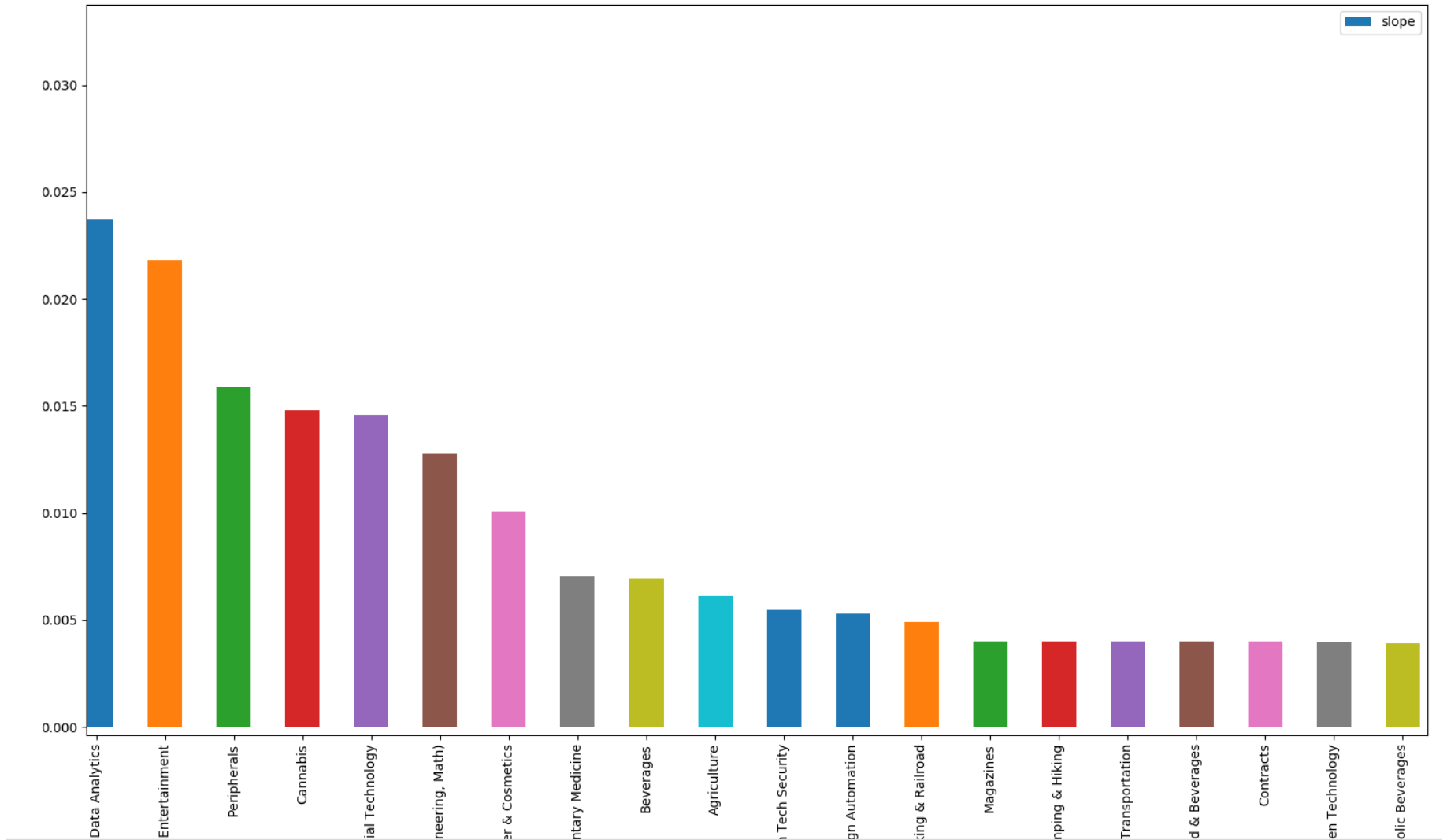
Resampled (Monthly)

PR News count trend per industries

```python
def trend_line(data, order=1):
    coeffs = np.polyfit(range(len(data.index)), data, order)
    slope = coeffs[0]
    return float(slope)

slope_df = pd.DataFrame(time_df.groupby('level3').apply(lambda x: trend_line(x.pr_count)))
```
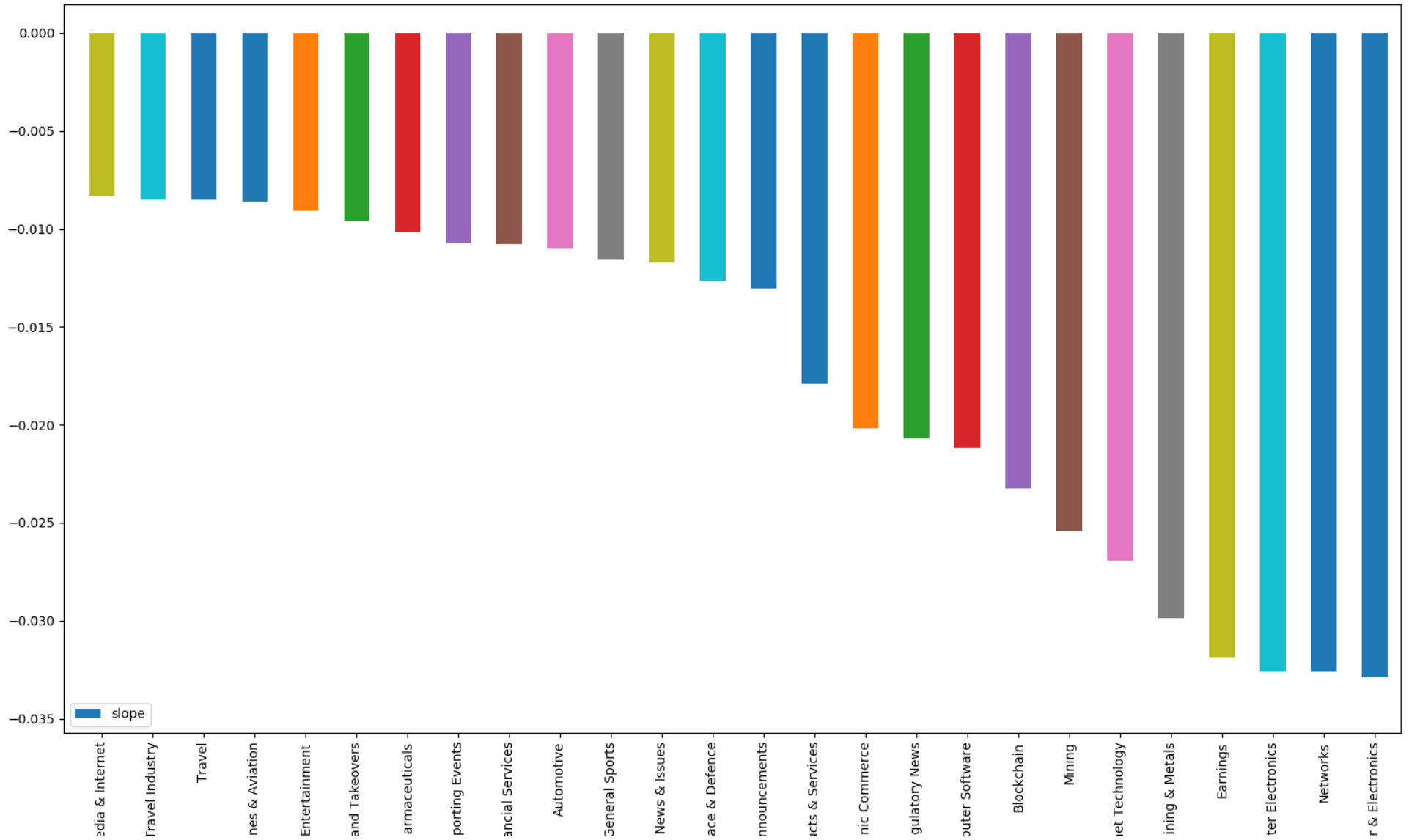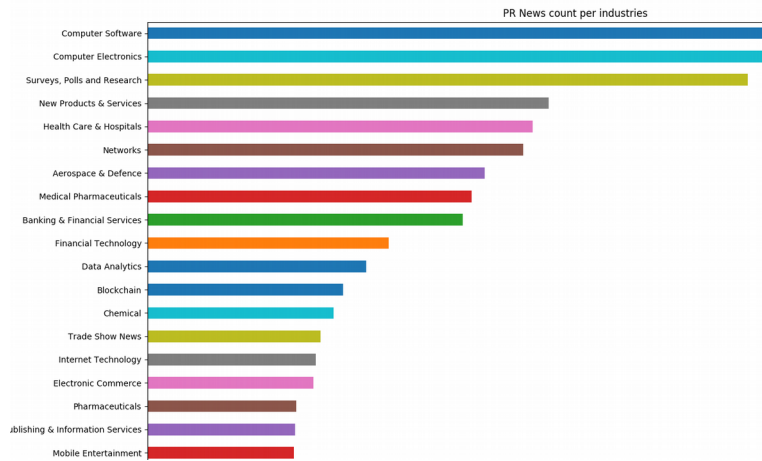
Top

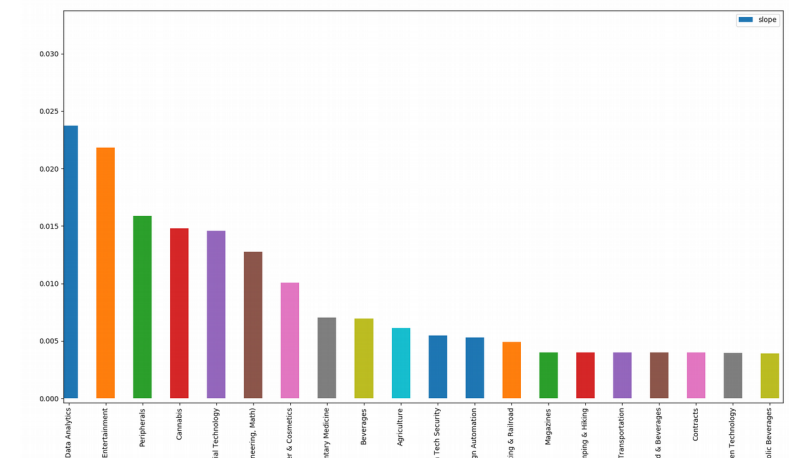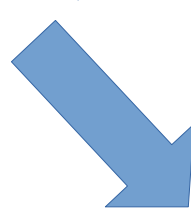# Bottom

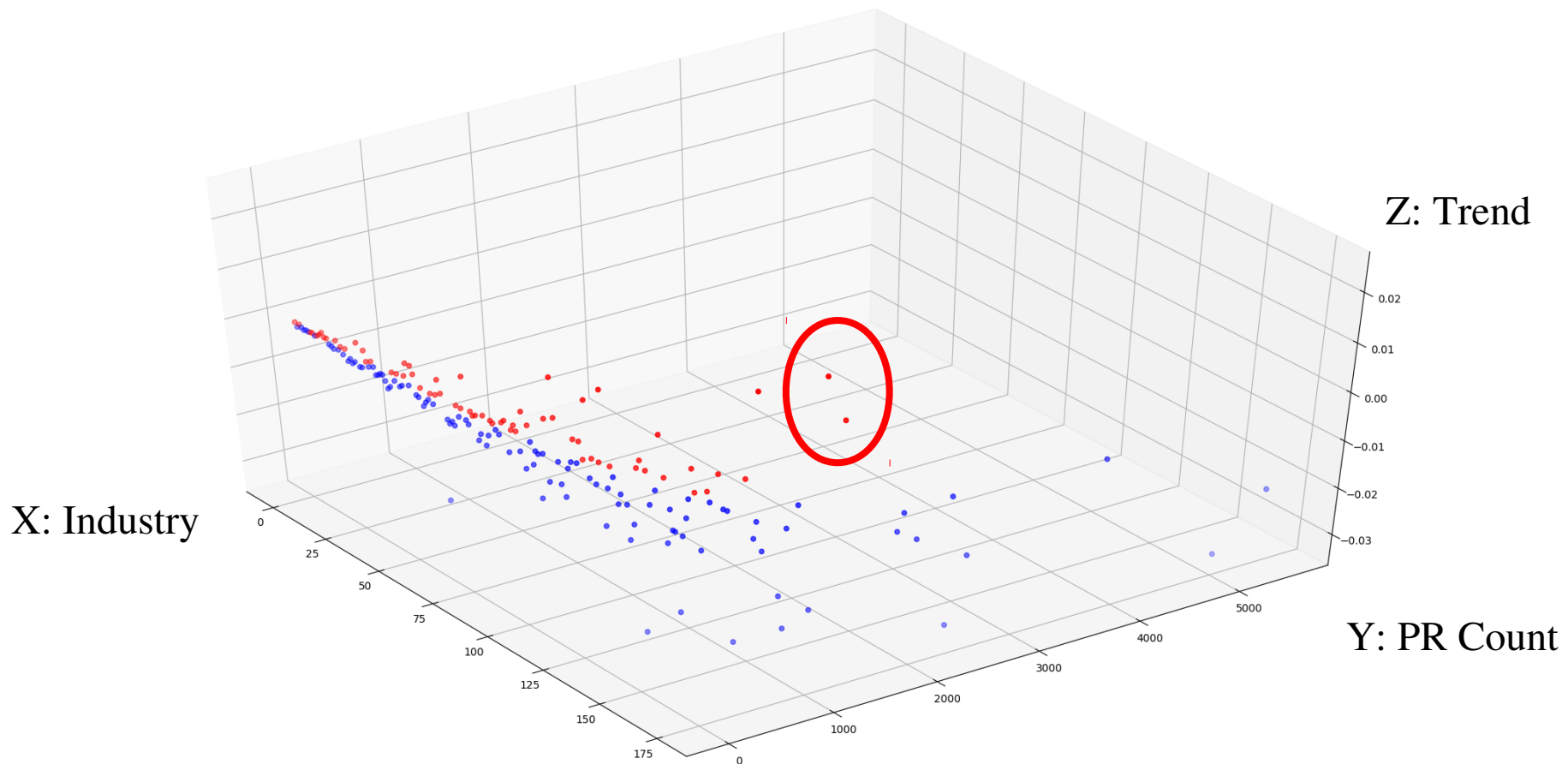# We need to see 2 variables at the same time

Industry against PR Count

Industry against trend

3D Plot

So, What industries have the most promising future?

- High rank in PR_Count + Upward slope = good industry

What industry do you want to work for?

High rank in PR count, Upward trend

- Data Analytics
- Financial Technology

Good!!!

High rank in PR count, but, Downward trend

- Blockchain
- Networks
- Computer Electronics

Watch out!!!

Future Improvements

- Implementing DB storage for daily batch

- NLP for categorization

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