

### "Nurturing Minds and Touching Lives"





Cliniminds, Think-I & Team of Business Analytics and Consulting Experts Offers India's First Industry Academia Collaborative Program in Pharmaceutical Business Analytics





### **Presentation Objectives**

### "Cliniminds is committed to provide highest quality of skills, education, training & business solutions and provide highly skilled & job ready talent pool for the global health sciences industry."





### **Presentation Objectives**

• To provide information related to career opportunities in analytics and consulting within Pharmaceutical industry





## **Program Vision**

At Cliniminds we love to educate, support and inject the passion we have for business analytics and consulting into our in-depth training program





### What is Analytics?



### Data on its own is useless unless you can make sense of it!

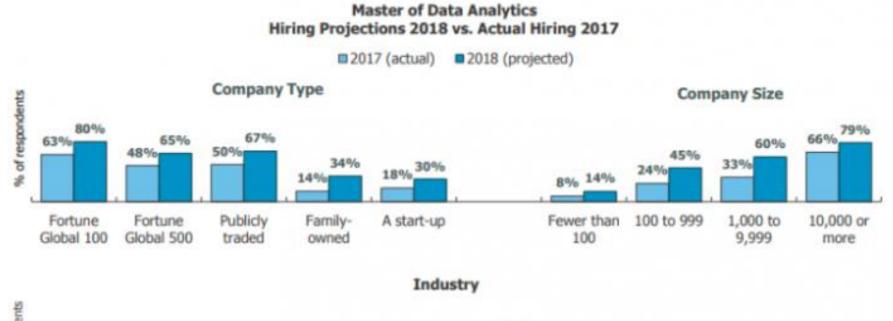
#### WHAT IS ANALYTICS?

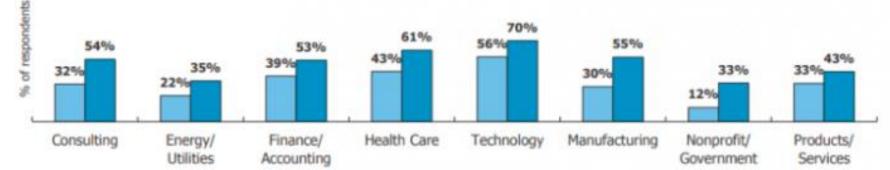
The scientific process of transforming data into insight for making better decisions, offering new opportunities for a competitive advantage





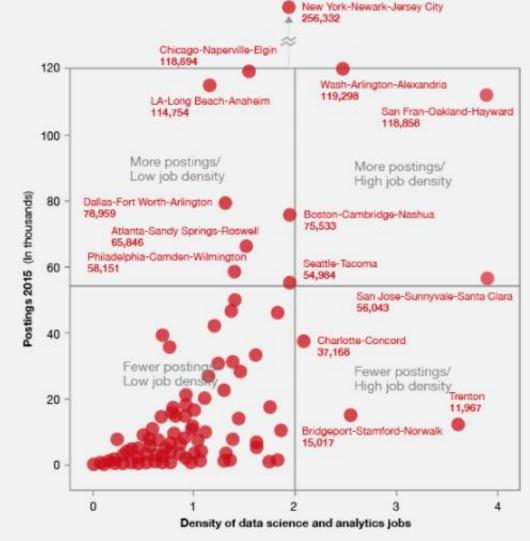
# Health Care has High Demand in Analytics





Cliniminds Institute of Health Sciences Training & Management AN ISO 9001:2015 Certified Academy

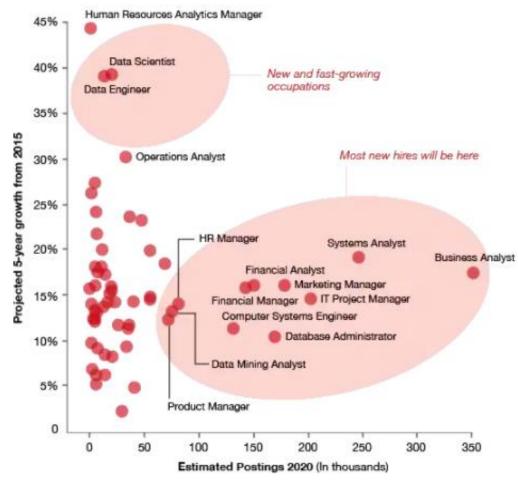
# Where data science and analytics markets are forming ?



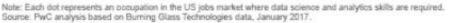




# The 2020 estimate calls for 2.7 million job postings for data science and analytics roles









# Where you can work ?



# Where you can work ?







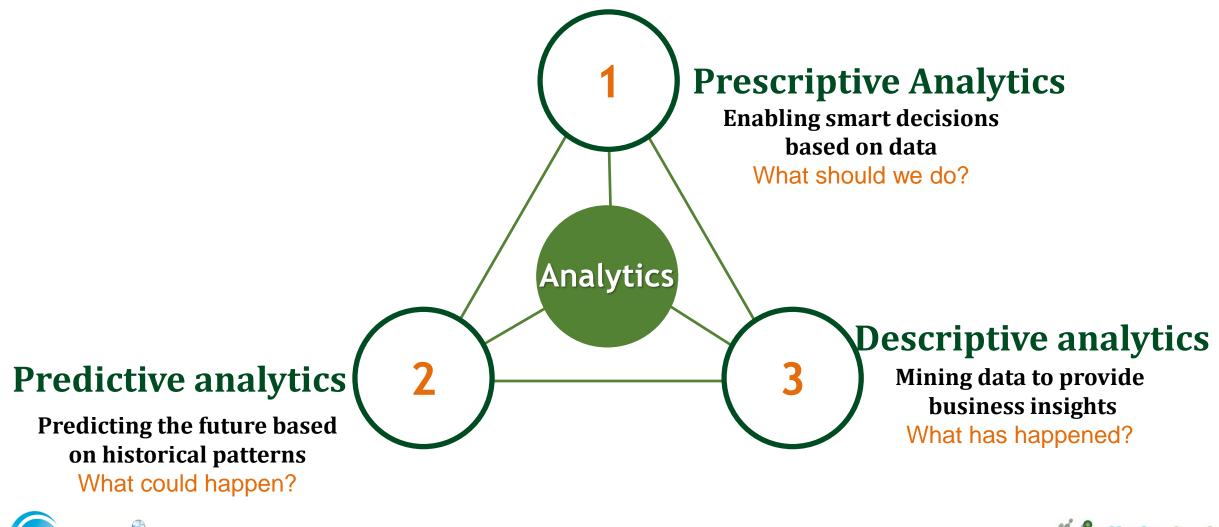
# Salary Range for Freshers

Employment by Function	% of Grads in this Function	Lowest Salary	Mean Salary	Highest Salary
Business / Data Analytics	53%	\$60,000	\$82,433	\$100,000
Finance	20%	\$18,000	\$74,900	\$88,000
Consulting	18%	\$82,000	\$95,833	\$110,000
Marketing / Sales	8%	\$65,000	\$89,500	\$115,000





### **Types of Analytics**







### **Big Data Analytics?**



#### Why is Big Data Analytics important?

Big data analytics helps organizations harness their data and use it to identify new opportunities. That, in turn, leads to smarter business moves, more efficient operations, higher profits and happier customers.



# Why the course is needed ?

To enter Pharmaceutical Analytics and Consulting Industry

To enter Pharma companies as Consultants/ Analysts in below departments

- CI
- Forecasting
- Busines Analytics
- Market Research
- SFE
- Advanced Data Analytics
- Decision Analytics
- Chart Audit



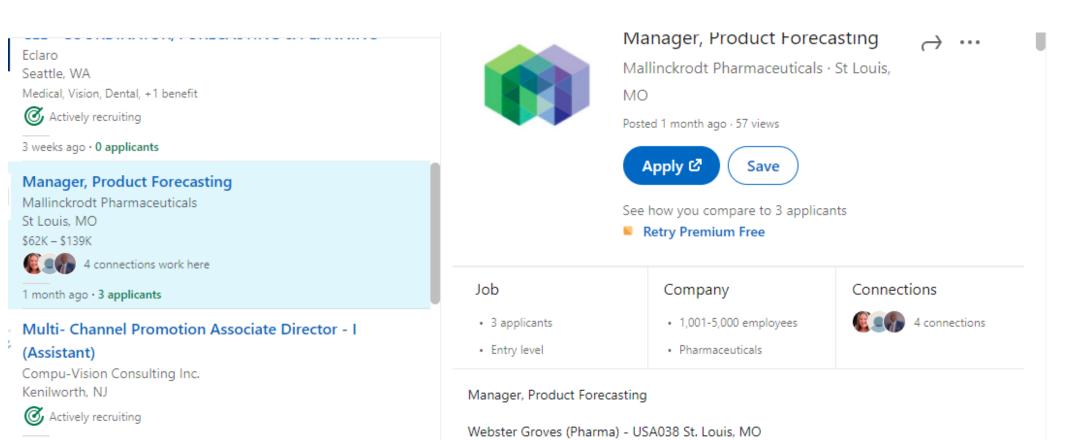


# Who Can Join ?

- Pharmaceutical professionals
- Non practicing medical professionals
- IT Professionals
- University Students
  - Market Research
  - Analytics
  - MS
  - MBAs
  - PharmDs



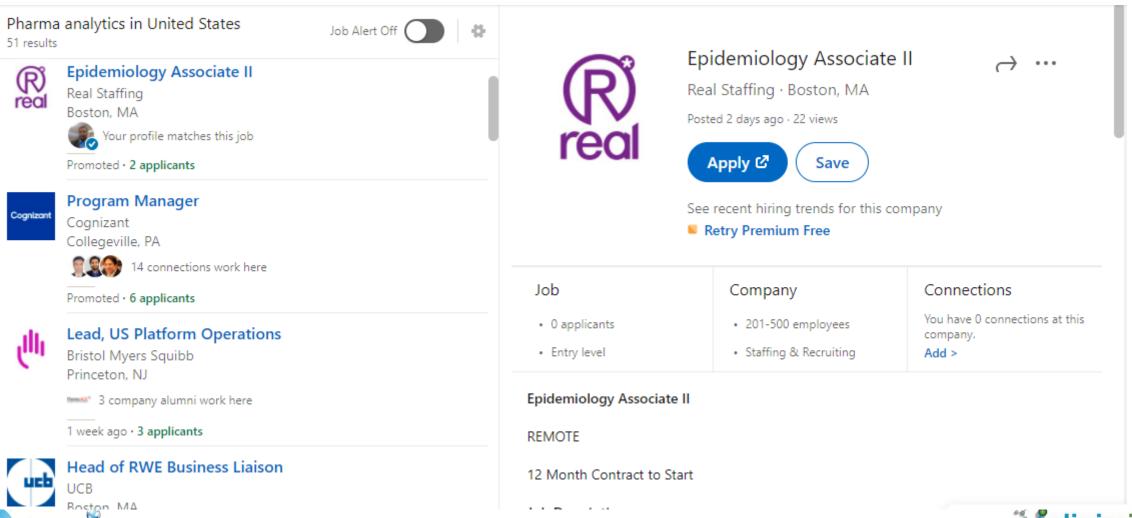




1 month acro - 1 applicant







AN ISO 9001:2015 Certified Academy

**Commercial Operation Associate, Pharma** 

Pharma commercial analytics in United Sta... Job Alert Off 8 results

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Commercial Analytics - Cambridge KMK Consulting Inc. Cambridge, MA Medical, 401(k) 1 connection works here

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Pharma Business Analyst with Commercial

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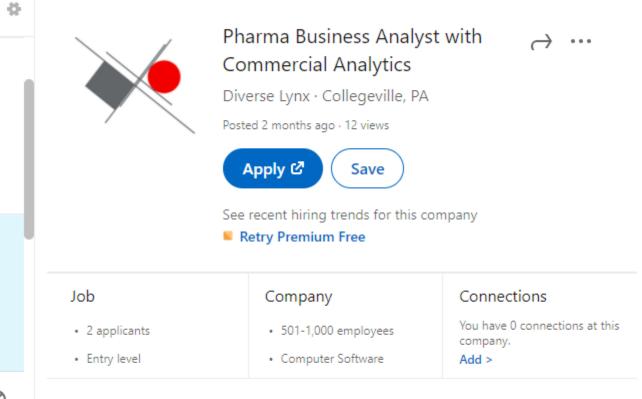
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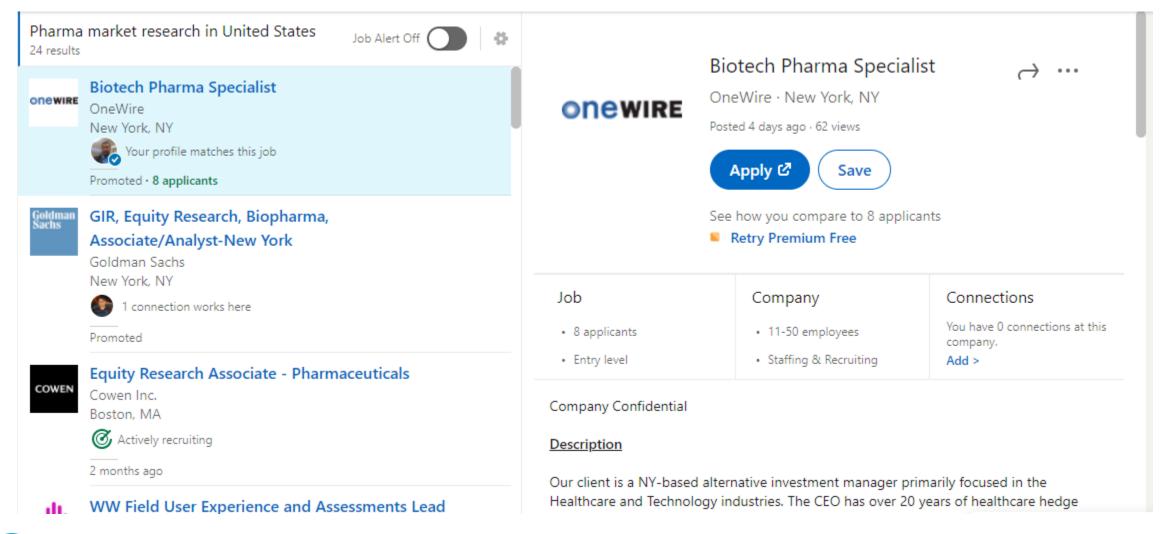
KMK Consulting Inc. Cambridge, MA Medical, 401(k)



Role: Pharma Business Analyst with Commercial Analytics (Pharma Background) Location: Collegeville, PA Rate: \$60/Hr on C2C Client: GSK











# US Business Analytics and Consulting Recruiters





### **Why Training in Analytics Critical**

Skills required for analytics jobs in these industries differ drastically from what is included in life sciences graduate/post-graduate curriculum.

Key skills required for analytics role

### <u>Scientific</u>

- Deep domain knowledge
- Healthcare structure by geography (US, EU, and others)
- Clinical trial and pipeline analysis

### **Commercial**

- Qualitative/Quantitative market research
  - Secondary
  - > Primary
- Forecasting skills
- Market assessment
- Segmentation and targeting

### Analytics

• Consulting skills

#### **Data analytics**

- Excel based analysis
- Advanced analytics (SAS, SQL etc)
- Big data analytics

### **Real World Evidence analytics**

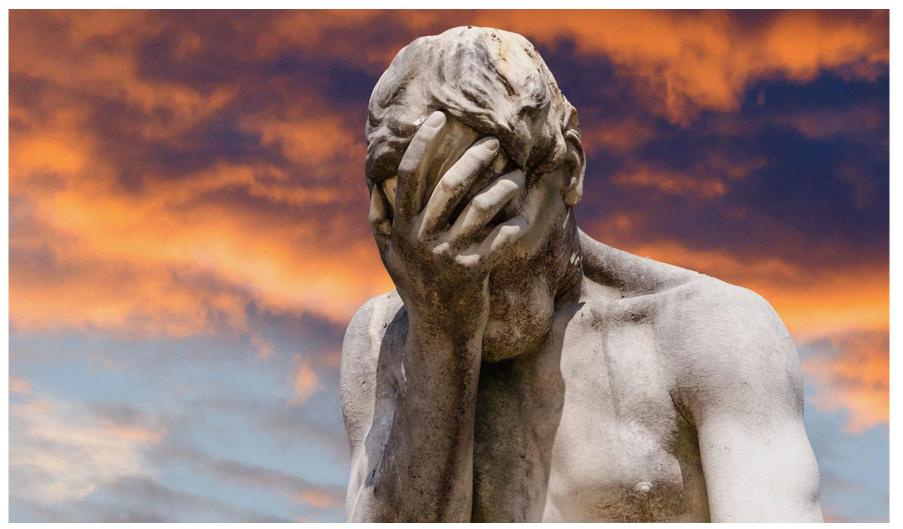
- Systemic literature review
- Medical writing
- Pharmaco-economics

### Project management skills





# Lack of these skills lead to employee and organization frustration







# **Cliniminds Pharmaceutical Data Analytics Course Focus and Goal**

# Pharma business analytics course is designed to cater skill gaps through

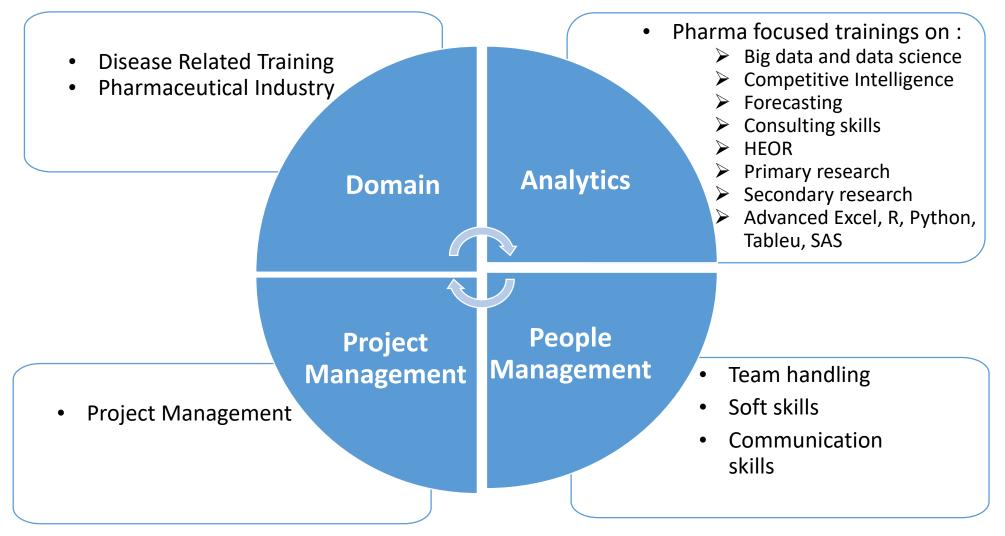
- Intense focus on domain and analytics
- Case based curriculum, with real life examples from healthcare industries
- Overview of big data in the context of health care industry

# GOAL of this course is to empower student to take up analytics role in pharmaceutical and healthcare industry and have a successful career in this exciting field





### **Cliniminds Pharmaceutical Data Analytics Course will build required skills through 4 Modules**







### **Course Module 1-Domain**

#### **Domain Expertise**

This would include industry relevant training on

Oncology

Diabetes

Cardiovascular

Rare diseases and metabolic diseases.

#### and focus on

Pathophysiology

Patient segments

Treatment guidelines

Trial analytics and pipeline assessment

Unmet need assessment for diseases and pharmaceutical science.

This module will also include training on healthcare structure of key global healthcare markets like US & EU





### **Course Module 2-Analytics**

### Analytics

Trainings would be pharma and industry relevant and would include

- <u>Understanding US and Europe Healthcare Ecosystem</u>
- <u>RWE Real World Evidence</u>

(Clinical Trial Optimization; Commercial Analytics, Comparative Effectiveness Research, Value Based Pricing, Evidence Based Medicine, Medical Writing & Systematic Literature Search)

• Excel Analytics:

(Using excel for analytics in pharma industry, applying basic analytical and advanced analytical formulae and skills to derive insights related to data)

• Forecasting (Patient / Sales/ Non Patient/ Epi based):

(This would provide training on relevant forecasting techniques such as patient based forecast, sales based forecast, using simulations (monte carlo, AT risk), and portfolio valuations.)

- <u>Strategy, Market Estimation & Competitive Intelligence</u>
- <u>Commercial Analytics</u>: Patient level data analytics
- <u>Sales Analytics</u>: Sales force effectiveness/Incentive Compensation/ Promotional Mix analytics





### **Course Module 2-Analytics**

- <u>Big Data and Data Science</u>: This would provide knowledge regarding role of big data analytics in pharmaceutical industry. Focus of this course would be to make graduates aware of technologies and platforms and how use them for analytics in the industry. Key topics that would be covered:
  - Hypothesis generation
  - Introduction to database systems,
  - Data analytics languages (R, Python)
  - Introduction to Data visualization tools (micro-strategy, Tableau, etc.)
  - NLP and machine learning techniques





### **Course Module 2-Analytics**

- <u>IP Research</u>: This would provide training on IP Research techniques.
- <u>Consulting Skills</u>: This would provide training on hypothesis generation, consulting frameworks, and would involve case studies from pharmaceutical industry, with a focus to develop critical thinking and business decision making skills
- <u>Primary Research</u>: This would provide training on various primary research analytical techniques used in pharmaceutical industry. Training will include qualitative and quantitative research, and would make students well versed with questionnaire design, data collection, analytics and insight generation





### **Course Module 2-Analytics (Datasets Understanding)**

- <u>Sales Data</u>: IQVIA/ AVACS
- <u>Presecptions Data</u>: Prescription data by products/ company/ Indications
- <u>Promotional Data:</u> Pharma companies investment data by channels, which helps in calculating Share of Details and Share of Voice
- Patient Level Data: Patient Level Longitudinal data
- <u>Pipeline Databases</u>: Clinical Trial.gov, Private databases
- <u>Epidemiology Databases</u>: Pubmed and Private databases
- <u>Other Datasets</u>: CDC, SEER, FDA and private database





<u>**Project Management :**</u> This module will focus on making students well versed with concepts of project types, stakeholder management, time management, risk management, quality management and communication management.

The aim of this core will be to make student efficiently handle projects within the industry. This would also cover operational excellence (Lean & six sigma concepts).

**Fundamentals of Financial Analysis:** 

- Resource utilization
- Business Excellence
- Billable/ Vs Non billable
- Billing Rates





### **Professional Development & People Management**

- This module will arm student with skills critical for
  - Working in teams and soft skills,
  - Interview skills,
  - Networking,
  - Presentation and communication skills
- which play important role in corporate organization.





### Know Your Tools & Why Learn About Them?



### **Tools Covered in Program**

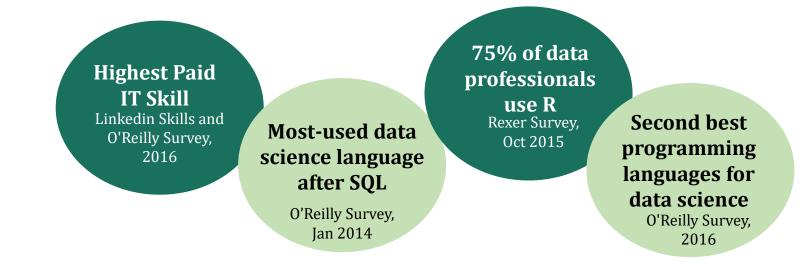




The program is developed keeping in mind the needs of an evolving Analytics industry that requires individuals to be "job-ready" from Day 1.



### Why R?



R is the #1 Google Search for Advanced Analytics software Google Trends, April 2016

> **R is #13 of all Programming Languages** *Redmonk Language Ratings, June 2015*

Demand for R language skills is on the rise.

**Companies Already Onboard R** 

Genpect
KPMG
<b>Evolent Health</b>
& Many More
-





### Why Python?

Official language of Google 2<sup>nd</sup> most popular data science language

Python is a powerful, flexible, open-source language that is easy to learn, easy to use, and has powerful libraries for data manipulation and analysis

# What are the reasons for its sudden popularity?Cost of<br/>OwnershipPython is an open source software<br/>that is free to download.VersatilityMulti-purpose language that can be<br/>used to build an entire applicationBig data<br/>compatibilityPython has become one of the big go-to languages for big data processing due to its wide<br/>selection of libraries

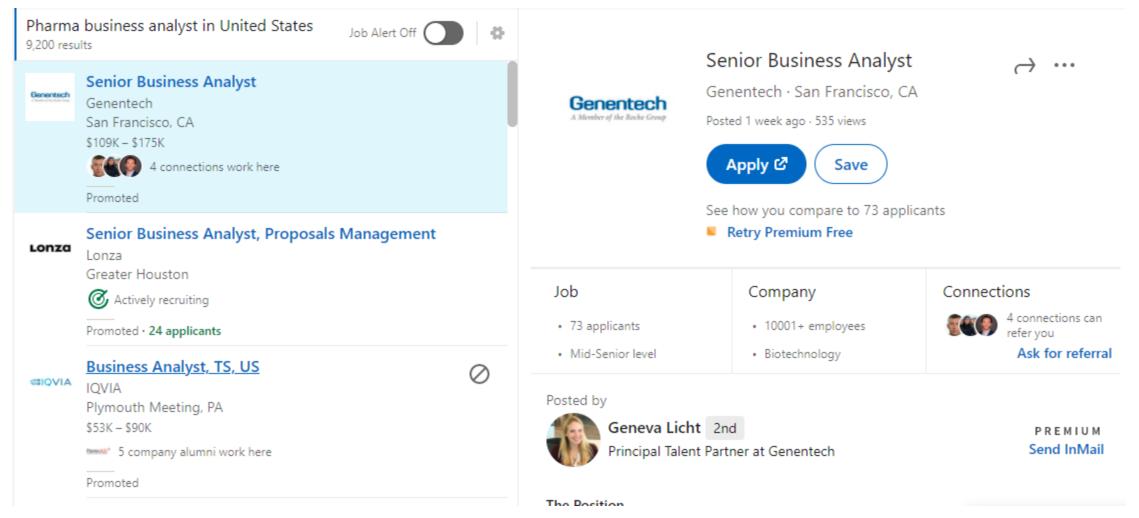
Python is particularly useful in data analytics because it has a rich library for reading and writing data, running calculations on the information and creating graphical representations of data sets.

We can write map reduce programs in python using PyDoop. Here is where Python scores over R. While R uses in-memory processing, Python using PyDoop can process PetaBytes of data



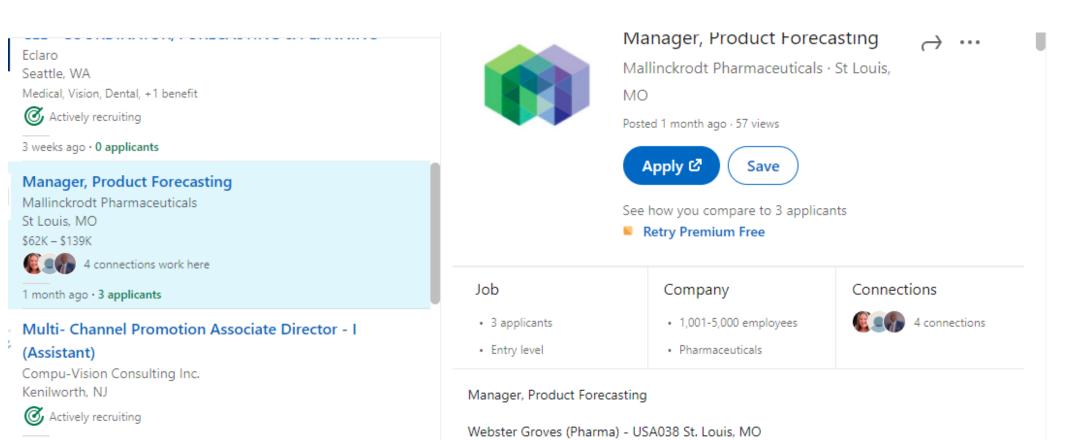


# Job Opportunities: 9K Jobs





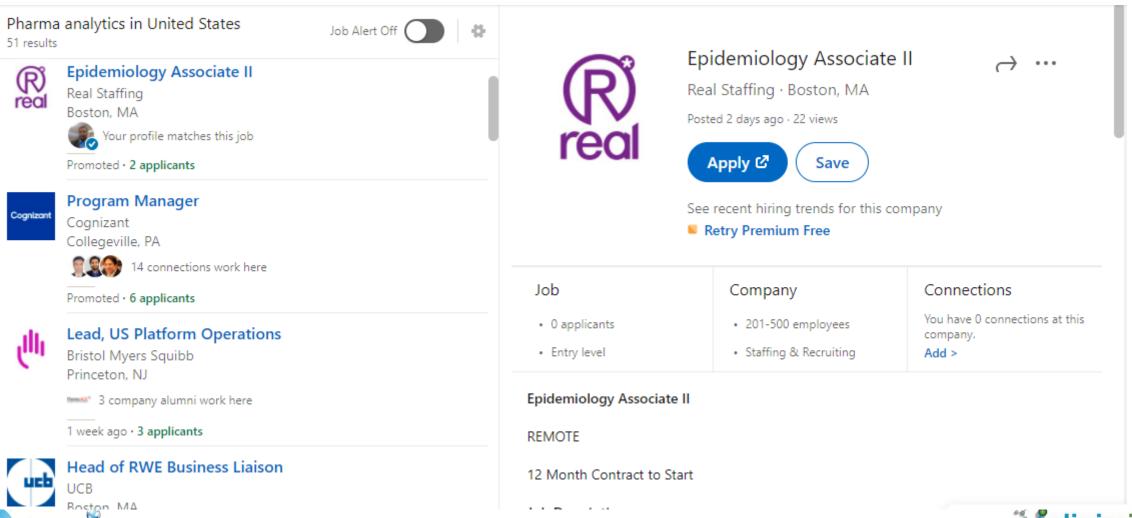




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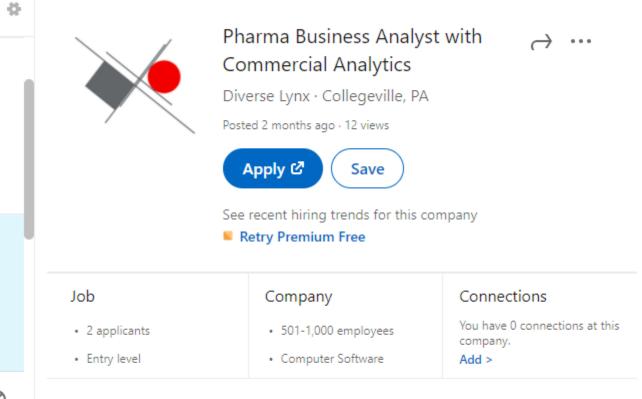
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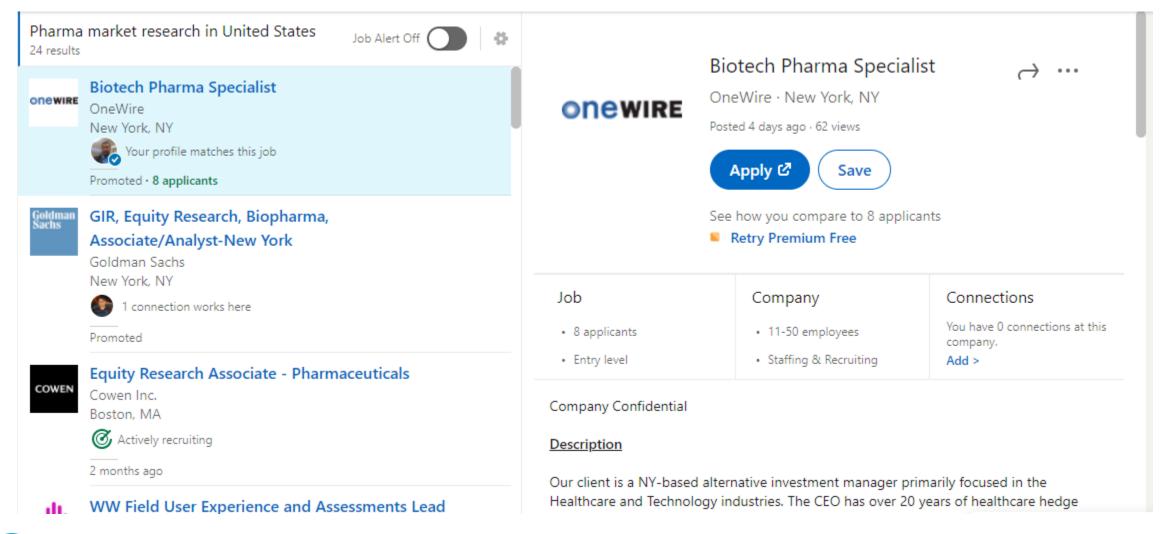
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