Python for Data Science

Sirakorn Lamyai

July 27, 2019

Student, Kasetsart U.

About me

Sirakorn Lamyai

- DAKDL Laboratory, Kasetsart University
- Research Assistant Intern, 2019, Vidyasirimedhi Institute of Science and Technology
- Research Assistant Intern, 2018, Vidyasirimedhi Institute of Science and Technology
- Love drinking tea
- Knows a little about Python

I know a little about Python

When I say I know *a little* about Python...

- I think there's some better methods than I'm using
- I think I do sometimes make mistakes
- There are tons of people who know things much more than me
- I think there's much more for me to learn!

Prerequisite

A basic Python knowledge will do!

Your expectations from this talk

Outline

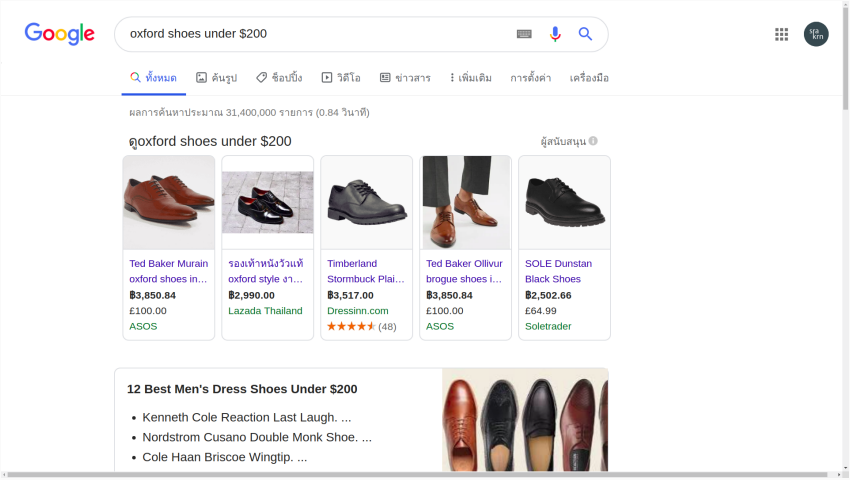
Data Science

Data Science

The Data Science Process: OSEMNI

- **Obtain** data from relevent sources
- **Scrub**, sanitise, and clean the data into machine-understandable formats
- **Explore** significant and meaningful patterns with statistical methods
- **Model** construction for prediction and forecast
- **iNterpret** and use the results obtained
- **Interate** and rethink about your outputs

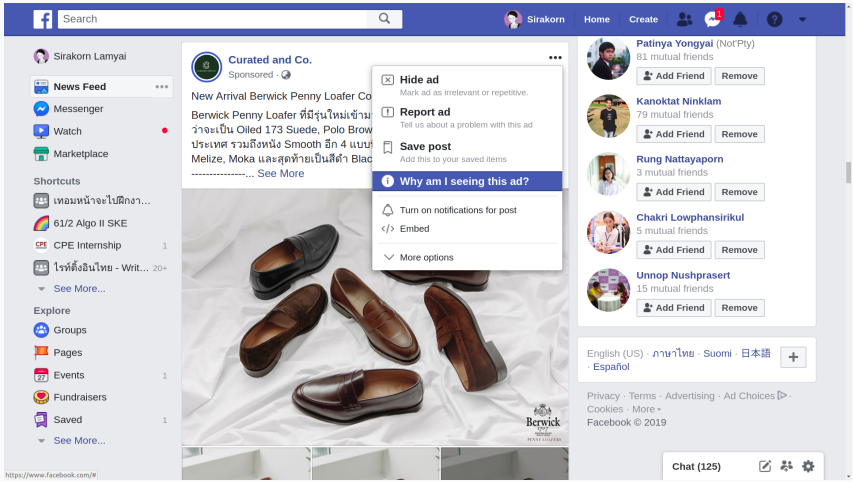
Why data?


Google
oxford shoes under $200
ทั้งหมด
ค้นรูป
ช็อปปิ้ง
วิดีโอ
ข่าวสาร
เพิ่มเติม
การตั้งค่า
เครื่องมือ
ผลการค้นหาประมาณ 31,400,000 รายการ (0.84 วินาที)
ดูoxford shoes under $200
ผู้สนับสนุน
Ted Baker Murain oxford shoes in…
฿3,850.84
£100.00
ASOS
รองเท้าหนังวัวแท้ oxford style งา…
฿2,990.00
Lazada Thailand
Timberland Stormbuck Plai…
฿3,517.00
Dressinn.com
(48)
Ted Baker Ollivur brogue shoes i…
฿3,850.84
£100.00
ASOS
SOLE Dunstan Black Shoes
฿2,502.66
£64.99
Soletrader
12 Best Men's Dress Shoes Under $200
Kenneth Cole Reaction Last Laugh. ...
Nordstrom Cusano Double Monk Shoe. ...
Cole Haan Briscoe Wingtip. ...

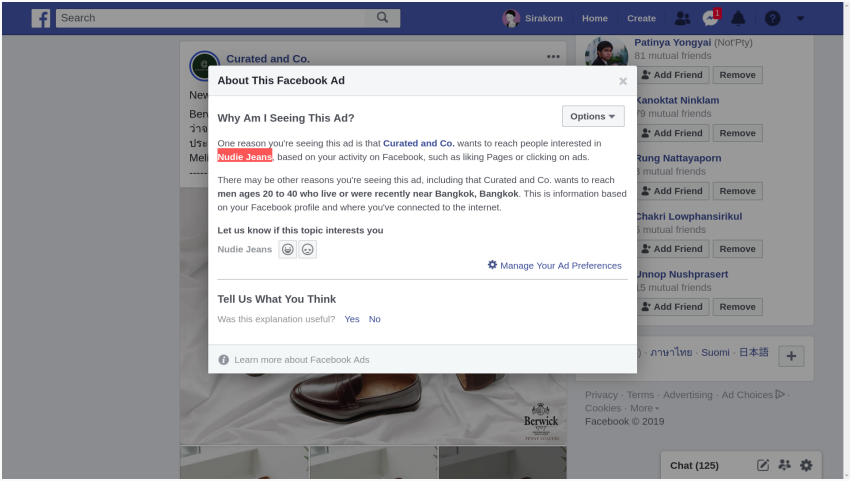
Why data?

Search
Sirakorn
Home
Create
Sirakorn Lamyai
News Feed
Messenger
Watch
Marketplace
Shortcuts
เทอมหน้าจะไปฝึกงา...
61/2 Algo II SKE
CPE Internship
ไรท์ดิ้งอินไทย - Writ...
See More...
Explore
Groups
Pages
Events
Fundraisers
Saved
See More...
Curated and Co.
Sponsored
New Arrival Berwick Penny Loafer Collection !
Berwick Penny Loafer ที่มีรุ่นใหม่เข้ามาให้เลือกกันถึง 6 แบบเลยทีเดียวครับ ไม่ว่าจะเป็น Oiled 173 Suede, Polo Brown Suede ที่ได้รับนิยมมากๆในต่างประเทศ รวมถึงหนัง Smooth อีก 4 แบบที่สวยลงตัวมากๆ ไม่ว่าจะเป็น Vegano Melize, Moka และสุดท้ายเป็นสีดำ Black Box Calf ที่คลาสสิกตลอดกาล ----------... See More
Berwick
Patinya Yongyai (Not'Pty)
81 mutual friends
Add Friend
Remove
Kanoktat Ninklam
79 mutual friends
Add Friend
Remove
Rung Nattayaporn
3 mutual friends
Add Friend
Remove
Chakri Lowphansirikul
5 mutual friends
Add Friend
Remove
Unnop Nushprasert
15 mutual friends
Add Friend
Remove
English (US) · ภาษาไทย · Suomi · 日本語 · Español
Privacy · Terms · Advertising · Ad Choices · Cookies · More
Facebook © 2019
Chat (125)

Why data?


Search
Sirakorn
Home
Create
Sirakorn Lamyai
News Feed
Messenger
Watch
Marketplace
Shortcuts
เทอมหน้าจะไปฝึกงา...
61/2 Algo II SKE
CPE Internship
ไรท์ดิ้งอินไทย - Writ...
See More...
Explore
Groups
Pages
Events
Fundraisers
Saved
See More...
Curated and Co.
Sponsored
New Arrival Berwick Penny Loafer Co
Berwick Penny Loafer ที่มีรุ่นใหม่เข้ามา
ว่าจะเป็น Oiled 173 Suede, Polo Brow
ประเทศ รวมถึงหนัง Smooth อีก 4 แบบ
Melize, Moka และสุดท้ายเป็นสีดำ Blac
---------- See More
Hide ad
Mark ad as irrelevant or repetitive.
Report ad
Tell us about a problem with this ad
Save post
Add this to your saved items
Why am I seeing this ad?
Turn on notifications for post
Embed
More options
Berwick
Patinya Yongyai (Not'Pty)
81 mutual friends
Add Friend
Remove
Kanoktat Ninklam
79 mutual friends
Add Friend
Remove
Rung Nattayaporn
3 mutual friends
Add Friend
Remove
Chakri Lowphansirikul
5 mutual friends
Add Friend
Remove
Unnop Nushprasert
15 mutual friends
Add Friend
Remove
English (US) · ภาษาไทย · Suomi · 日本語 · Español
Privacy · Terms · Advertising · Ad Choices · Cookies · More
Facebook © 2019
Chat (125)
https://www.facebook.com/#

Why data?


Search
Sirakorn
Home
Create
Curated and Co.
About This Facebook Ad
Why Am I Seeing This Ad?
Options
One reason you're seeing this ad is that Curated and Co. wants to reach people interested in Nudie Jeans, based on your activity on Facebook, such as liking Pages or clicking on ads.
There may be other reasons you're seeing this ad, including that Curated and Co. wants to reach men ages 20 to 40 who live or were recently near Bangkok, Bangkok. This is information based on your Facebook profile and where you've connected to the internet.
Let us know if this topic interests you
Nudie Jeans
Manage Your Ad Preferences
Tell Us What You Think
Was this explanation useful? Yes No
Learn more about Facebook Ads
Patinya Yongyai (Not'Pty)
81 mutual friends
Add Friend
Remove
Kanoktat Ninklam
79 mutual friends
Rung Nattayaporn
Chakri Lowphansirikul
Unnop Nushprasert
15 mutual friends
Privacy · Terms · Advertising · Ad Choices · Cookies · More
Facebook © 2019
Chat (125)

Data is the new oil

Tools for data analysis

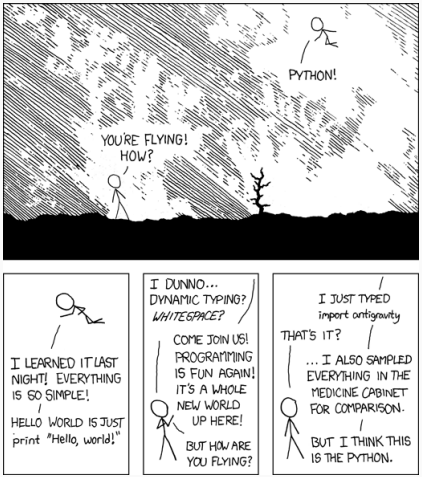
With GUIs

- Spreadsheets
  - Excel
  - Google Spreadsheets
  - Lotus 1-2-3
- Modelling and Visualisation
  - RapidMiner Studio
  - Weka
  - Tableau

As programming languages

- For data insights
  - R
  - Python
- For data retrieval
  - SQL

Python

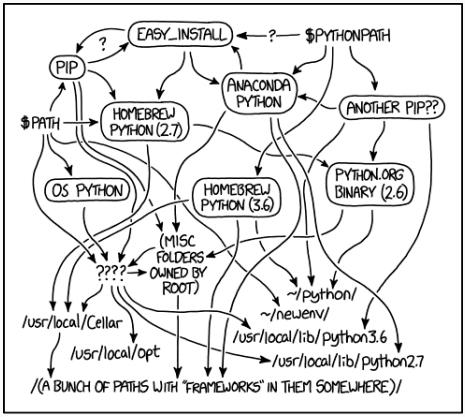


Courtesy: xkcd (`https://xkcd.com/353/`)

I *loved* Python...

- Read it, understand it
- Multiparadigm
- Batteris included
- Lots of great, great libraries!

...yet sometimes I still feels bad with it.



Courtesy: xkcd (`https://xkcd.com/1987/`)