在社交網絡中如何找到他？

香港中文大學工程學院副院長（外務）
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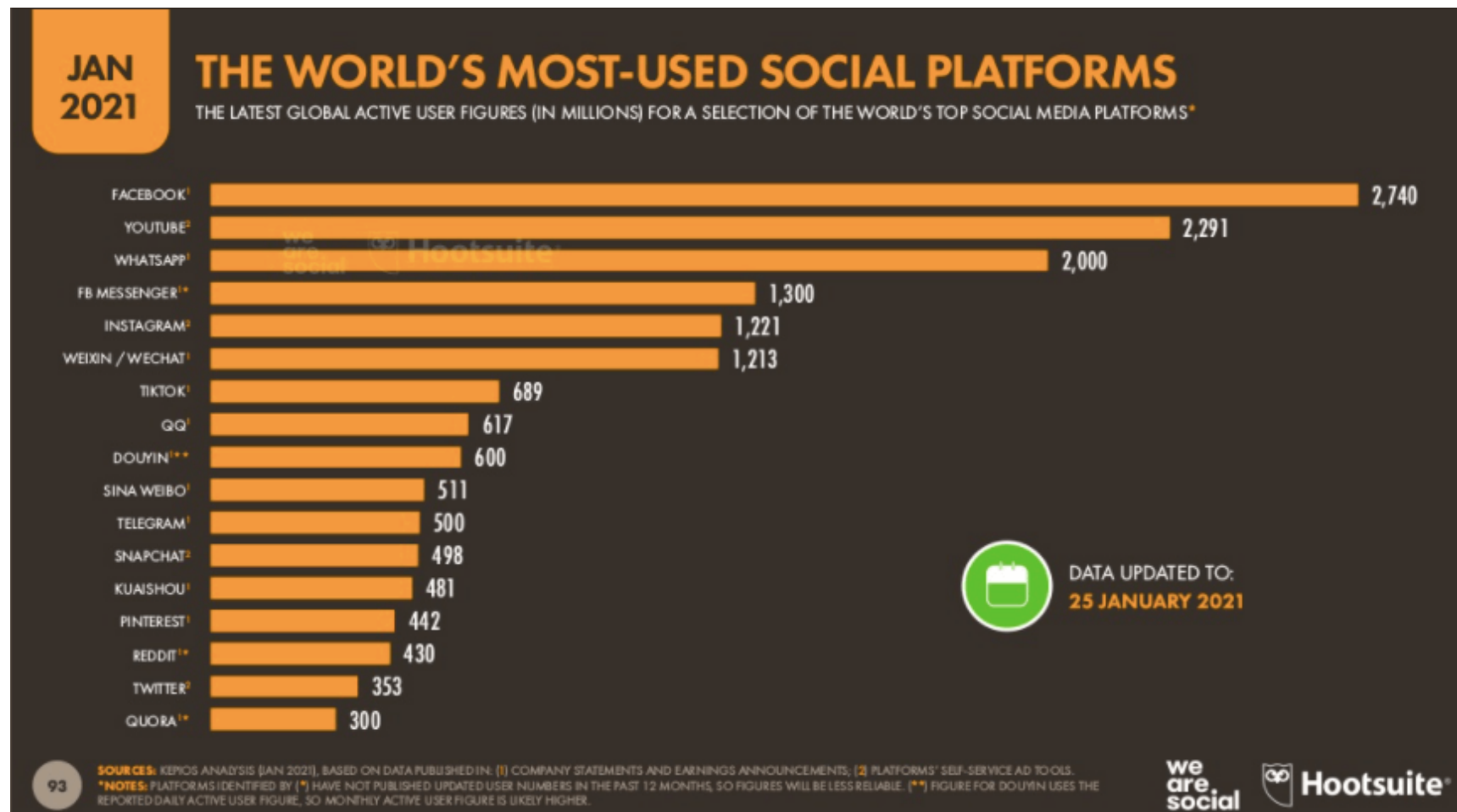
http://www.se.cuhk.edu.hk/~kfwong

大綱

1. 社交網絡趨勢

2. 什麼是大數據？

3. 個人私隱數據

4. 社交網絡陷阱

5. 虛假資訊

6. 結語

1. 社交網絡趨勢

2021年全球用戶於各社交平台的使用情況

https://datareportal.com/reports/digital-2021-hong-kong

2021年香港用戶使用社交平台的情況

https://datareportal.com/reports/digital-2021-hong-kong

2. 什麼是大數據？

Volume （超大量）

Variety （多樣化）

Velocity （超速）

*

Value （價值）

Veracity （真實性）

超大量: 2021年全球使用數據量

https://datareportal.com/reports/digital-2021-global-overview-report
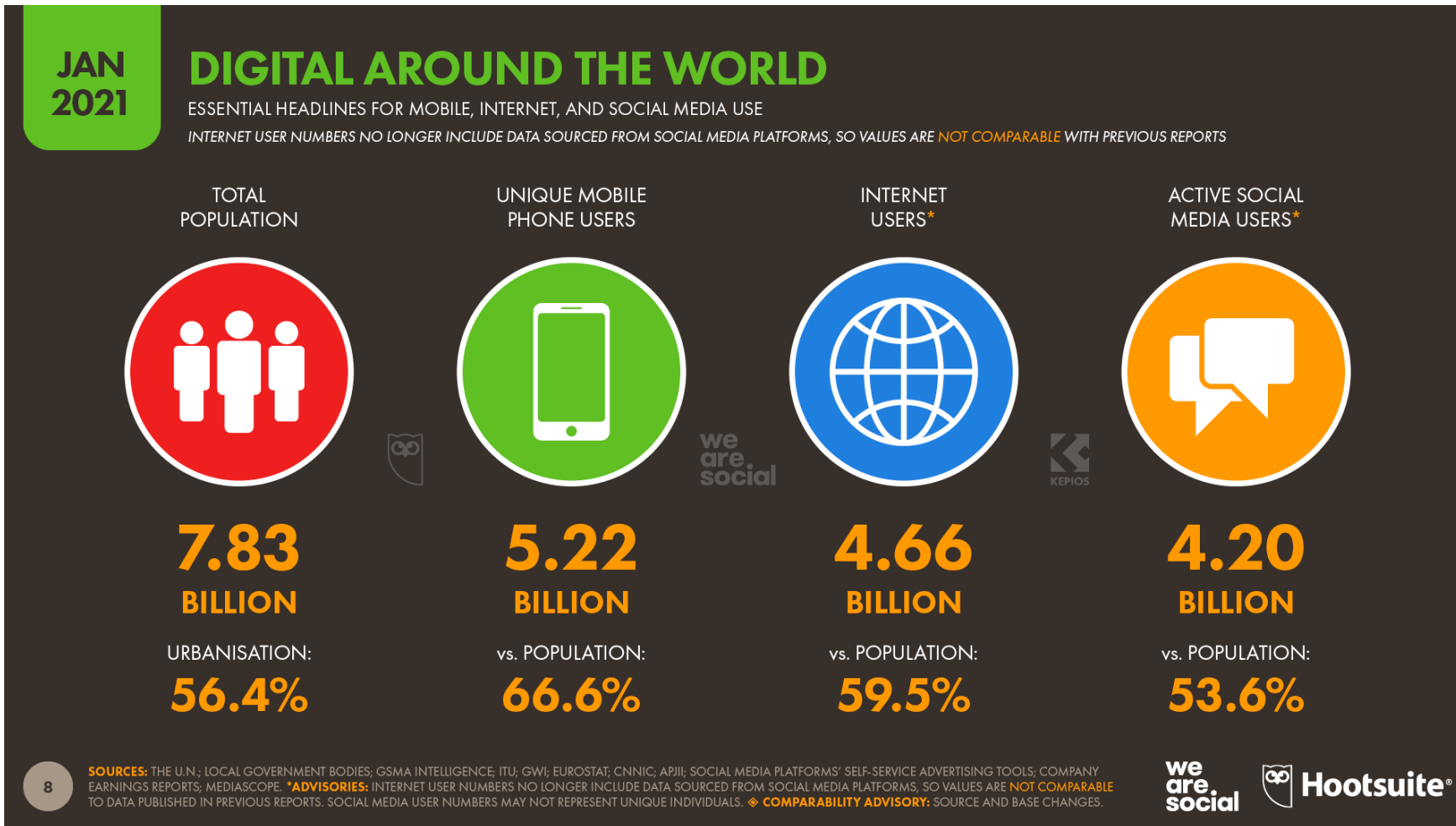
超速:全球每秒處理多少數據？

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press this to scroll

多樣化:
信息表達方法林林總總

在社交網絡如何找到他?

「眾里尋他千百度，驀然回首，那人卻在燈火闌珊處。」

典出辛棄疾〈青玉案〉

大綱

1. 社交網絡趨勢
2. 什麼是大數據?
3. 個人私隱數據
4. 社交網絡陷阱
5.虛假資訊
6. 結語

a) 學生報名表

No. _____

THE CHINESE UNIVERSITY OF HONG KONG
Office of Admissions and Financial Aid

CUHK Golden Jubilee Celestial Civilian Scholarship on Hong Kong Literature 2020/21
Application Form

1. The information gathered will be used for Scholarships/Awards-related purposes in the University. It may be accessible to offices, committees or persons involved in Scholarships/Awards matters. Records of unsuccessful candidates will be destroyed when no longer required.
2. The application form should be **typed** in **English** and **signed**. Handwritten form will NOT be accepted. If the item(s) in the form is/are not applicable, "N/A" should be marked.
3. Completed application form together with all requisite documents (except letter of recommendation) should be submitted online at https://cloud.itsc.cuhk.edu.hk/webform/view.php?id=11335554 on or before **14 May 2021**. Late or incomplete applications will **NOT** be considered. *Please refer to Notes for Applicants attached to the application form for the requisite documents to be submitted by the applicants.*

Personal Data

Name _____ _____ CU Student ID No. _____
(In BLOCK LETTERS, SURNAME FIRST) (In Chinese) (10 digits)

Gender _____ Major / Programme of Study @ _____

Mode of Study _____ Full-time _____ Current Yr of Study Yr. ____ Expected Graduation in^ ___ / 20 ___ (MM/YYYY)

Date of Birth ___ / ___ / ___ (DD/MM/YYYY) Residency Local / Non-Local * Citizenship _____

Home Address _____

_____ Telephone _____ Mobile _____

E-mail Address _____ (CUHK) / _____ (Personal)

@ Please type the full programme title, e.g. PhD in Biology, MPhil in Psychology, B.Eng. in Electronic Engineering.
^ Please follow the expected graduation date printed on your student card.
* Please delete whichever is inappropriate.

Educational Qualifications – for postgraduate students only

Month / Year   Name of Institution   Qualifications Obtained @
1. _____
2. _____

@ e.g. B.A. in Fine Arts (First Class Honours), M.Phil. in Biology

Admission Channel – for undergraduate students only (Please put a '✓' in an appropriate box.)
☐ JUPAS (HKDSE)   ☐ Non-JUPAS (Local)   ☐ Mainland
☐ Others (Please specify) _____

Title of Research Paper / Thesis / Dissertation (Please also provide the title in English if your research paper / thesis / dissertation is written in Chinese or other languages.)

_____
_____

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Awards / Academic Achievements before the academic year 2020/21

Academic Year   Name of Award   Amount (HK$)
1. _____
2. _____
3. _____

Awards / Academic Achievements for the academic year 2020/21

Name of Award   Amount (HK$)   Status
Awarded / Applied for / Nominated *
1. _____ in _____ /20 ___ (MM/YYYY)
Awarded / Applied for / Nominated *
2. _____ in _____ /20 ___ (MM/YYYY)

* Please delete whichever is inappropriate

Extra-curricular Activities

Month / Year   Student Organization/Activities   Post / Contribution
1. _____
2. _____
3. _____

Working Experience (including part-time and summer jobs)

Month / Year   Name of Employer   Job Title
1. _____
2. _____
3. _____

Authorization and Undertaking

I hereby declare that the information provided in this form is correct and true to the best of my knowledge. I authorize the Office of Admissions and Financial Aid (OAFA) of The Chinese University of Hong Kong to obtain any information from other units of the University which OAFA considers necessary and relevant to the administration and assessment of my application for the captioned Award.

I understand that The Chinese University of Hong Kong Library (CUHK Library) reserves the right to publicize the awards, its beneficiaries and details of the winning entry as it sees fit, and the submission of this application signals acceptance of the abovementioned.

I give my consent to CUHK Library to post my research paper, thesis or dissertation, and the statement for the purpose of application for the Scholarship to the website of the Hong Kong Literature Database at http://libguides.lib.cuhk.edu.hk/HKLit should I be selected as the recipient of this Scholarship.

I also undertake to inform OAFA, as soon as practicable, of any awards/scholarships/prizes conferred to me for the academic years 2020/21 after submission of this form.

Signature of Applicant: _____ Date: _____

Note: All the data provided by the applicants should only be used for the purposes related to the award of scholarships/ bursaries. Data users must comply with the requirements of the HKSAR Personal Data (Privacy) Ordinance.

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b) 人臉識別

人臉識別4部曲

1 人臉偵測 (face detection)
從輸入的圖像中檢測，並提取人臉圖像。

2 人臉校正 (face alignment)
由於並非每張人臉也拍得角度端正，電腦檢測五官特徵後會「校正」，以提高識別準確度。

3 特徵提取 (feature extraction)
電腦通過「學習」大量人臉樣本，訓練深度神經網絡，準確地提取出人臉特徵，並將人臉轉換成一串精準的數字 (特徵向量)。(詳見「識別原理」)

校正

特徵向量
0.88
0.64
−2.58
1.01
……
−0.04
1.23

(primeimages@iStockphoto/明報製圖)

4 人臉識別 (face recognition)
人臉識別系統將兩張圖像的「特徵向量」比對，兩組數字愈相似，代表愈大機會是同一人。舉例說，兩部置於不同位置的攝錄機拍攝了疑犯犯案的過程，電腦計算兩幅人臉影像的特徵向量，比對兩組數字，並輸出配對結果 (人臉相似度)。
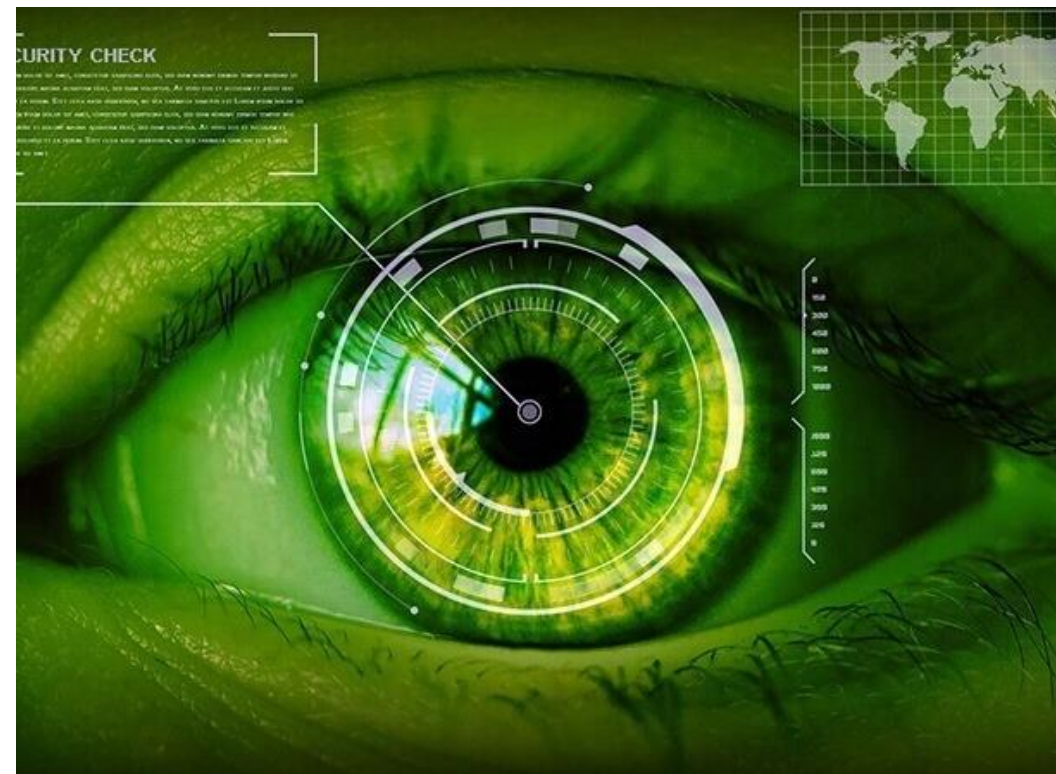
新相片特徵向量
0.88
0.64
−2.58
1.01
……
−0.04
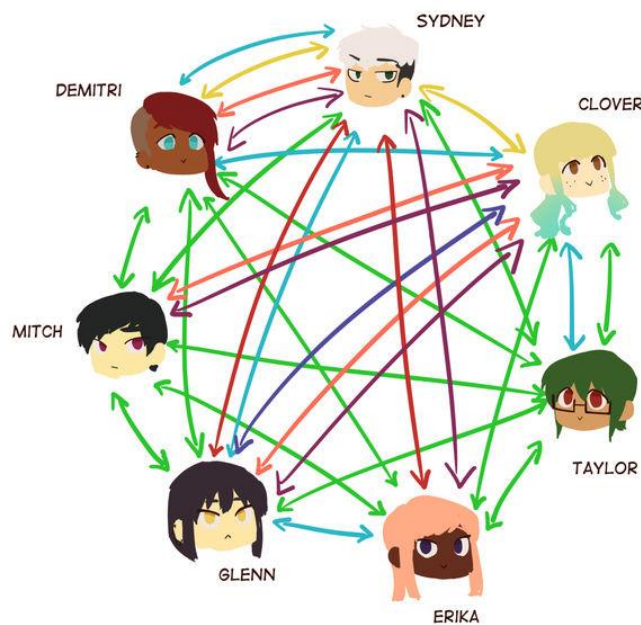1.23

資料庫相片特徵向量
0.68
0.74
−1.88
1.81
……
−0.14
1.53

相似度：96%

11

c) 瞳孔識別

d) 語音識別
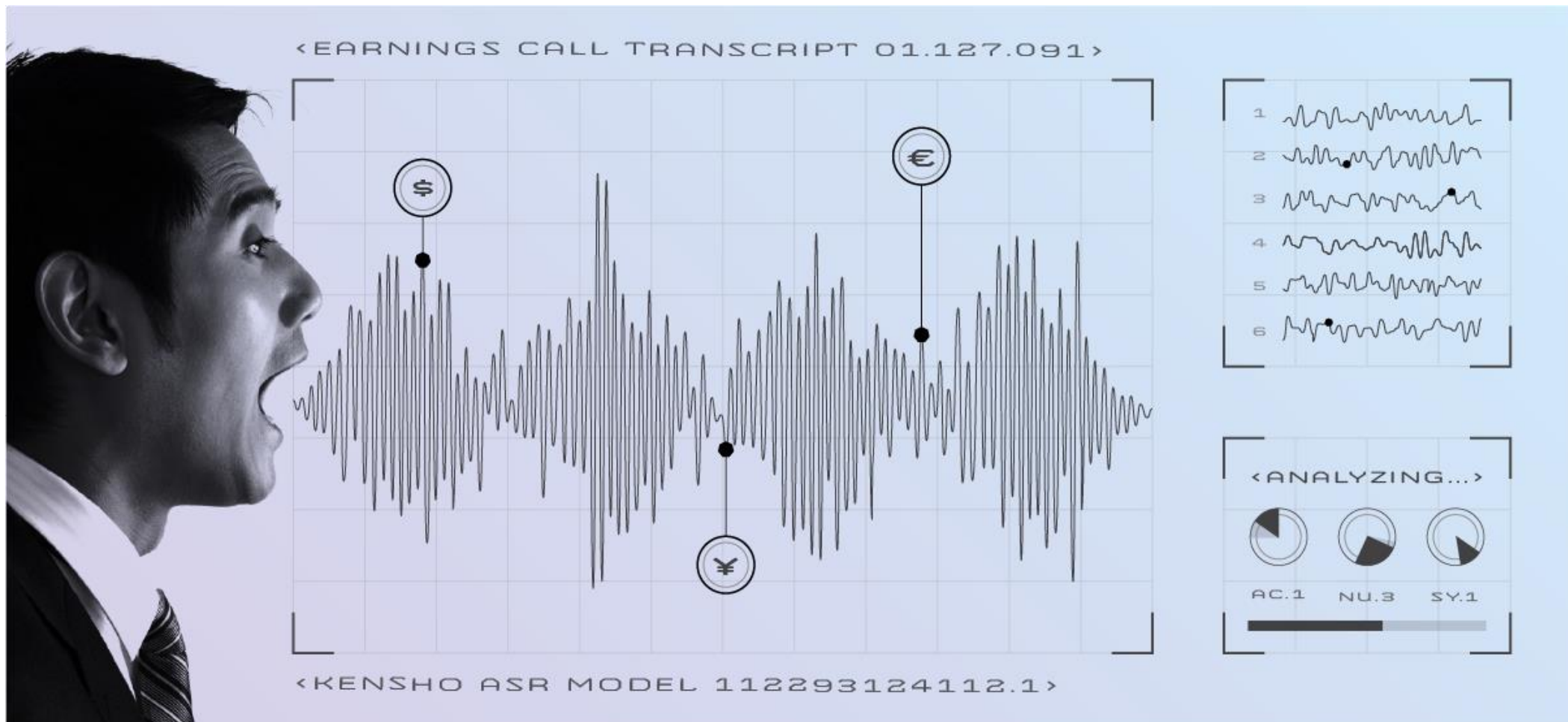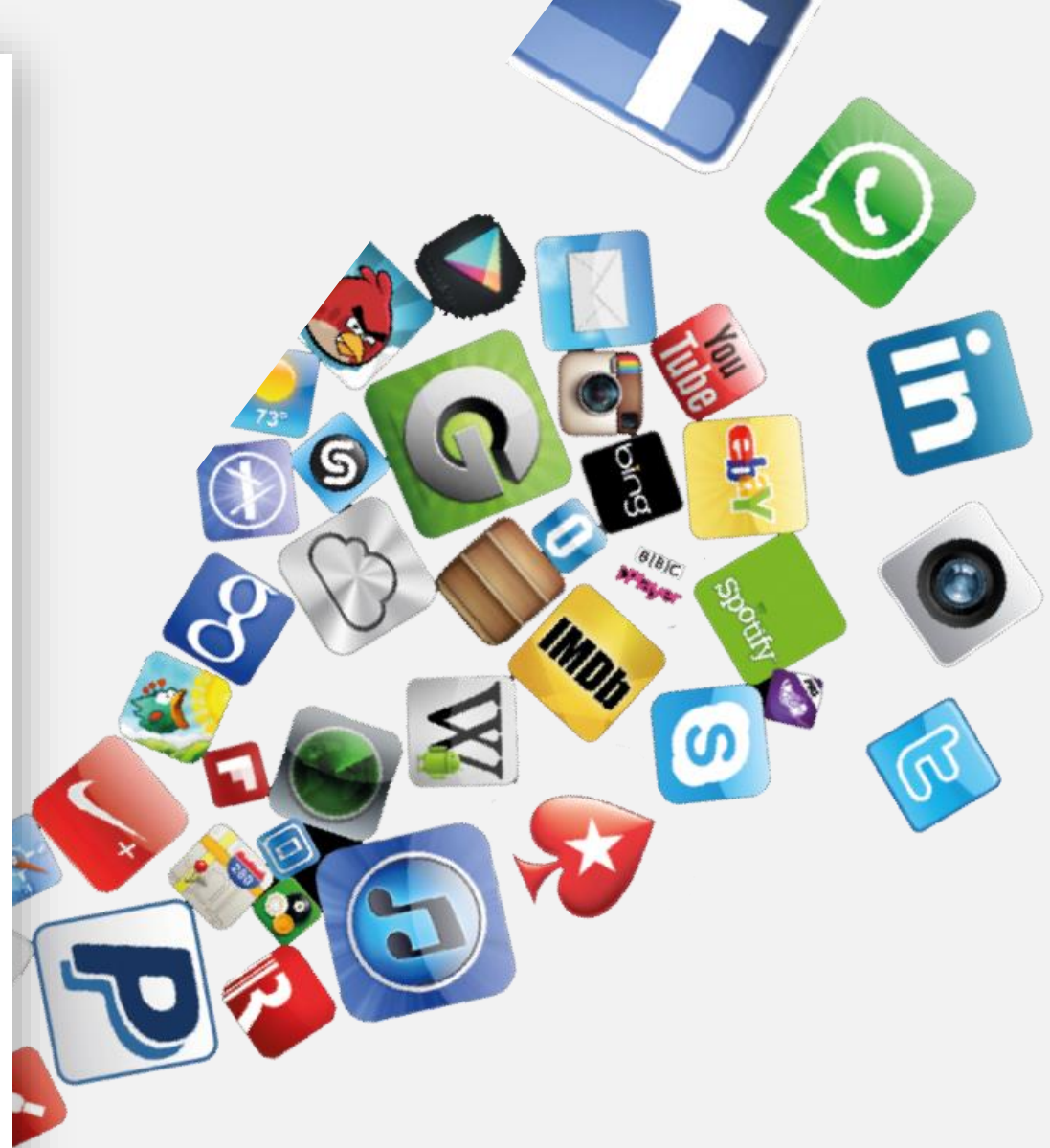
透過推敲人與人之間的關係...
來獲取更準確的資料
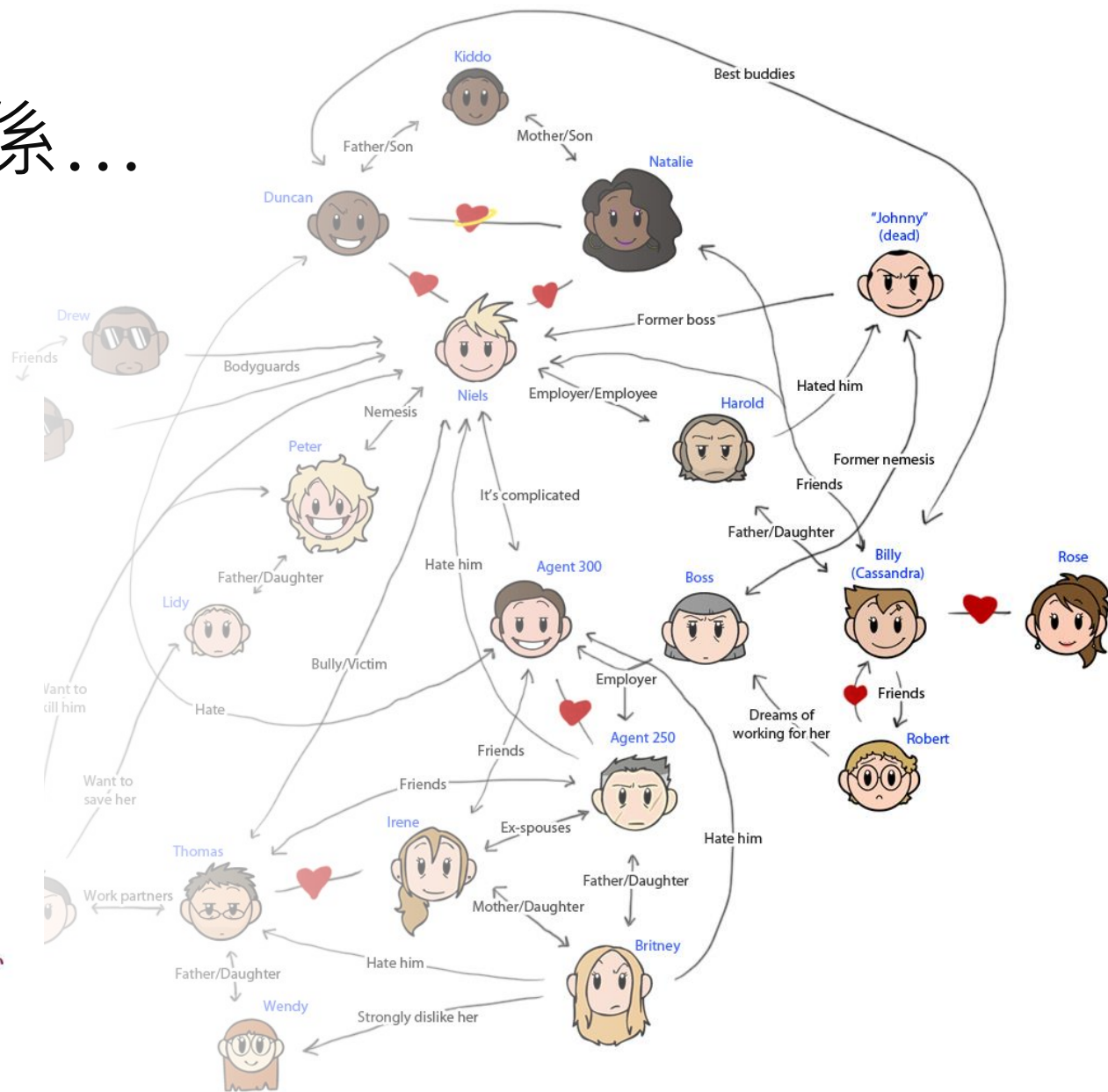
網絡足印

4. 社交網絡陷阱

i. 網上個性化推銷

ii. 「殺熟」

iii. 尋找顧客的弱點

iv. 「釣魚」

5. 虛假資訊

新聞- 新聞分析

- 事實驗證 (Fact Check)
- What? When? Where? How?
- 評論– 譽情分析
- 立場分析–情感分析

控制假新聞三部曲

- 自動篩選
- 立法
- 教育

5. 結語

在虛擬社會中駭客行為猖獗，所以大家要好好保護自己的數據和個人私隱，不要讓駭客有機可乘