

Reading the Collective Mind – Deep Learning to Process Social Signals

From global news big data to micro health sensors

(MIT IAP 2018 Course)

Course Time:

January 11, 2 to 5pm (Thursday)

January 12, 2 to 5pm (Friday)

Location: E62-446 (30 Memorial Drive)

Instructors: Peter Gloor, Qi Wen

Objectives:

**FIND
OUT**

WHO and what makes you happy

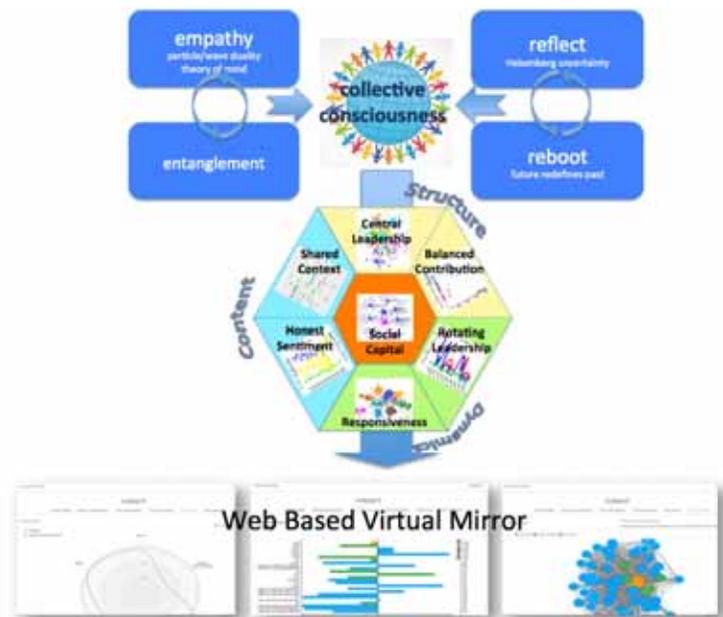
WHO likes you best and who is your most creative collaborator

WHAT will be the next big thing on social media

Introduction:

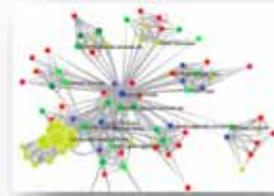
In this course we will try to predict what small teams and entire populations are thinking based on analyzing their communication archives.

Using the *Condor* and *Happimeter* softwares developed by the presenters and their team members we will use latest algorithms from *machine learning* and *dynamic semantic social network* analysis to read the collective mind.



Using the *Happimeter smartwatch* software will allow you to automatically measure how happy you are, how much you like others around you, how *stressed* you are, your *fairness*, and how much you *trust* and are *trusted* by tracking your body signals through the sensors of the smartwatch.

■ Applying the Condor analysis tool to your own e-mail (or slack, WhatsApp, or Skype log) will show your social network in a *virtual mirror*, and tell who respects you most, how passionate you and others are, and who your role models and influencers are.



■ Applying the Condor tool and doing dynamic semantic social network analysis on Twitter and other global social media data will allow you to automatically measure the influencers and virtual tribes behind fake news, and to decide in which virtual currency to invest.

(www.transparencyengine.org)



Course Outline

Day 1

Introduction to Swarm Creativity and COINs (Collaborative Innovation Networks)

Collaborative Innovation Networks (COINs) are small groups of self-organizing, emergent teams collaborating over the Internet. COINs are leading to larger groups, the Collaborative Learning Networks testing the prototypes of the COIN, and the Collaborative Internet Network spreading the word about the cool products of the COIN.

Creating a Virtual Mirror of your own mailbox with Condor

'Virtual Mirroring', increases individual and team creativity by analyzing and optimizing the seven "honest signals of collaboration": 'strong leadership', 'rotating leadership', 'balanced contribution', 'fast response', 'honest sentiment', 'shared context' and 'social capital'.

Measuring personal happiness and fairness with the happimeter

Using our Pebble smartwatch based happimeter allows you to measure emotional variables such as happiness, stress, and understanding. In this course you will be able to experiment with the Happimeter, for instance learning about what variables influence your personal happiness and emotions (www.happimeter.org)

Day 2

Coolhunting on Social Media to find trends and trendsetters

We will find trends and influencers through measuring and interpreting the seven honest signals of collaboration on Twitter, Wikipedia, the Web, and Facebook. Machine learning will help identify the user demographics of customer groups and the constituency of politicians.

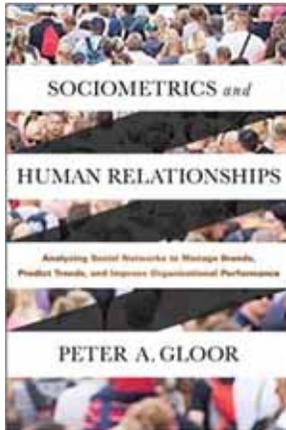
Finding fake news and measuring virtual currencies

We will identify fake news through machine learning, by identifying some interesting historical cases of fake news, and training an unsupervised learning system to distinguish fact from fiction. We will also try to predict the future popularity of different virtual currencies based on their social media perception.

Measuring individual trust with the happimeter

In the second part of experimenting with the happimeter you will learn about how trusting you are, and how much others trust you by playing the ultimatum game.

The course is based on the two new books by Peter Gloor

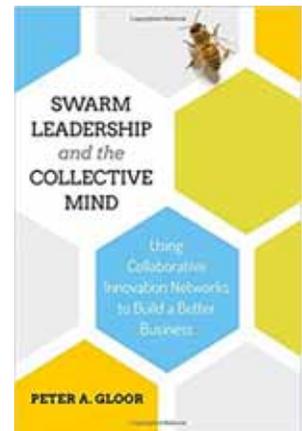


Swarm Leadership and the Collective Mind: Using Collaborative Innovation Networks to Build a Better Business, Emerald Publishing, London, 2017

<https://www.amazon.com/Swarm-Leadership-Collective-Mind-Collaborative/dp/1787142019/>

Sociometrics and Human Relationships: Analyzing Social Networks to Manage Brands, Predict Trends, and Improve Organizational Performance, Emerald Publishing, London 2017

<https://www.amazon.com/Sociometrics-Human-Relationships-Organizational-Performance/dp/1787141136>



Course Web site: www.ickn.org/iap.html

Download Condor: guardian.galaxyadvisors.com

Download Happimeter: www.ickn.org/documents/FlyerHappimeter.pdf