



香港浸會大學  
HONG KONG BAPTIST UNIVERSITY  
Department of Mathematics

普及數學公開講座

Public Lecture on Mathematics

從機器學習到人類創新

From Machine Learning to Human Innovation

Professor Edward Chang

*Director of Research, Google China*  
*Professor of University of California, Santa Barbara*



**Date:** 27 February 2009 (Friday)

**Time:** 4:30 pm (Preceded by Reception at 4:00 pm)

**Venue:** WLB203, The Wing Lung Bank Building,  
Shaw Campus, Hong Kong Baptist University



**摘要** 創新需要深思熟慮的準備，介於理想與現實，探索與開發之間，創新在很多方面可以被看作是一種平衡。在本文中，我們將應用機器學習理論來闡述人類學習的基本原理並試圖將這種學習與創新進行對比。一些機器學習演算法的實例將

用於解釋人類是如何實現更有效的學習的，而另一些藝術與文學方面的實例將用來展示人類的創新能力。最後，本文還將會以 Google 為例，討論它們的創新理念、文化和技術。

**Abstract** Innovation requires a prepared mind, which is a balance between ideal and necessity, between exploration and exploiting, and several other axes. In this talk, I will use machine learning theories to illustrate effective human learning principles, and use learning to contrast innovation. A few example algorithms of machine learning are used to explain how human can learn more effectively, and a few examples in art and literature are used to illustrate human innovation. The talk will also discuss Google's culture of innovation and some of its innovative technologies.



◆◆◆ All are welcome ◆◆◆

The Medium of Instruction: English

For enquires please contact Ms. Claudia Chui, 3411 2348.

<http://www.math.hkbu.edu.hk/>





香港浸會大學  
HONG KONG BAPTIST UNIVERSITY

Department of Mathematics  
數學系

Zhu Lixing, Professor  
朱力行教授

23 January 2009

Dear Sir / Madam,

**Public Lecture on Mathematics:**  
**From Machine Learning to Human Innovation**

We are pleased to inform you that Prof. Edward Chang, Director of Research, Google China, will be delivering a Public Lecture on Mathematics on 27 February 2009 (Friday). On behalf of the Department of Mathematics, Hong Kong Baptist University (HKBU), I would like to invite you and your students to participate in the above event. This lecture is delivered in English and is suitable for students of Form 4 and above. It provides a valuable opportunity for secondary school students to spark enthusiasm and cultivate interest in studying mathematics.

The lecture will be held at WLB203, The Wing Lung Bank Building, Shaw Campus, Hong Kong Baptist University, Kowloon Tong from 4:30 pm to 5:30 pm (reception at 4:00 pm). Shuttle service from MTR Kowloon Tong Station to the venue is provided upon prior arrangement.

Enclosed please find the poster of the event. If you are interested in joining the event, please kindly fill up the reply slip below and return to us by fax to 3411-5811. Should you have any enquiries, please do not hesitate to contact Ms. Candy Li at 3411-5056. We look forward to seeing you and your students at Prof. Edward Chang's lecture.

Yours sincerely,

Prof. Zhu Lixing  
Head and Professor of Statistics

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**Reply Slip – Public Lecture on Mathematics (27 February 2009)**

(Please complete and return by fax to 3411-5811)

Name of school: \_\_\_\_\_

Number of participants: \_\_\_\_\_ (student) \_\_\_\_\_ (teacher)

Will you require free shuttle service?  Yes  No

Contact person: \_\_\_\_\_

Tel. No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_



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敬啟者：

普及數學公開講座：「從機器學習到人類創新」

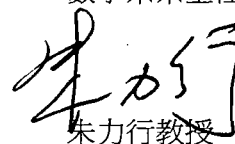
香港浸會大學數學系榮幸邀得張智威教授, Director of Research, Google China 於二零零九年二月二十七日〔星期五〕主持講座，主題為「從機器學習到人類創新」。我們誠意邀請 貴校學生參與這個活動。是次講座將以英語進行，對象為中四或以上的學生，我們希望透過這個活動提升年青人對數學的興趣和認識。

這講座將於香港浸會大學逸夫校園永隆銀行商學大樓 WLB203 室舉行，時間為下午四時半至五時半〔茶會時間為下午四時〕。我們可為 貴校提供由九龍塘港鐵站至會場的穿梭巴士服務，如需享用是項服務，請聯絡我們作事先安排。

有關是次講座之詳情，請參閱隨函附上之海報。如 貴校有興趣參與是次活動，請填妥下列回條傳真至 3411-5811。如有任何查詢，歡迎致電 3411-5056 與李小姐聯絡。我們期盼 貴校能撥冗蒞臨參與。

敬祝  
教安!

香港浸會大學  
數學系系主任



朱力行教授

謹上

二零零九年一月二十三日

回條 — 普及數學公開講座：「從機器學習到人類創新」

(二零零九年二月二十七日)

(填妥後請傳真至 3411-5811)

學校名稱 \_\_\_\_\_

參與人數 (學生) \_\_\_\_\_ (教師) \_\_\_\_\_

免費穿梭巴士接載  需要  不需要

聯絡人 \_\_\_\_\_

電話號碼 \_\_\_\_\_ 傳真號碼 \_\_\_\_\_

普及數學公開講座：「從機器學習到人類創新」

Public Lecture on Mathematics: From Machine Learning to Human Innovation

Date: 27 February 2009 (Friday) 二零零九年二月二十七日 (星期五)

Time: 4:30 pm to 5:30 pm 下午四時半至五時半

Venue: WLB203, The Wing Lung Bank Building 永隆銀行商學大樓WLB203室

