

留學申請經驗分享

for 台科大學弟妹

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A few things to be clear

- 以下存屬個人經驗，如有謬誤/冒犯還請見諒
- 內容皆以我申請 ME master 為準則
- 本投影片中英夾雜，覺得順就用英文，不順就用中文...

Who am I?

- 100級畢業
- 先當兵(1年)後申請
- 研究助理1.75年
- 錄取多間大學
- 最想去的都被拒絕

US:

- MIT (ME)
- JHU (ME)
- UMich (Robo)
- Purdue (ME)*
- UIUC (Robo)
- Rejected

Europe:

- ETH Zurich
- RWTH Aachen (Robo)

Australia:

- University of Melbourne
(Mechatronics)
- University of Queensland
- University of Sydney

Why?

- A Dream
- A Challenge
- A Career
- Life Style
- A Future



Why these countries

- Australia:
Easy lifestyle, not bad academically, easy immigration
- US:
Great academics, potential immigration
- Europe:
Affordable, Great academics

How?

Questions you need to ask yourself?

- Why? (Study/Travel)
- Programs
 - Master or PhD.?
 - Field
 - 從paper reference 找教授

What you need?

- \$\$\$
 - Language Tests (English)
 - GPA
 - Statement Of Purpose / Motivation Letter
 - CV
 - Recommendation letter
 - 時間規劃!!!
- 2兩件你最擔心的事!!!

Language Tests

- TOEFL iBT
 - More University, single accent, computer based, speak to machines.
- IELTS (Academic) L/S/R/W 各9, 0.5間距, 4個平均
 - More General, multiple accent (mostly British), **paper based**, speak to a real person.
- GRE (For all US and some non-US Grad Schools)
 - Hardest English Test on Earth
 - Logic + Vocabularies

Take GRE First, than the other. 越早準備越好 反正效期5年 慢慢放

2兩件你最擔心的事!!!

Language Test

- 真功夫-每天練, TED, CNN Student News, YouTube, 美劇(英文字幕)
- 考試技巧-補習班, IELTS Liz, 考滿分, Magoosh, TOEFL/GRE OG, Cambridge IELTS

\$\$\$

要還

- 家裡出/跟親戚借
- 銀行貸款(ex. 留學方案)

不用還

- 先工作存錢
- 獎學金 (學校, 教育部, 基金會, PhD)

\$€¥

- 學費：
 - US: 一年 3~5 萬美金 (90-150萬台幣) (公、私立差距大)
 - Australia:跟美國差距不大
 - Germany: 一年 300~3000歐元 (1-10萬) (不同program不同價)
- 住宿：
 - 城鄉差距大 (ex: \$700/月 vs \$1200/月)
- 獎學金：
 - 注意規則，但也不要被規則限制 (ex.DAAD 成績限制)
 - 有些獎學金會限制要回國(ex. Fullbright,教育部)
 - 通常自帶資金上的機率會高一些

CV-規劃未來的好利器

- Simple, Clean, Tidy, Concise
- Peer (Professor) review
- 思考CV上每句話的意義
- 專題：機械設計與實務
- 志工、社區服務
- 榮譽：書卷、比賽
- 研究/工作經驗/實習
- [網站1](#) [網站2](#) [網站3](#)

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EDUCATION

National Taiwan University of Science and Technology, Taipei, Taiwan

Bachelor of Science in Mechanical Engineering

Sept. 2011 - June 2015

- Overall GPA: 3.82/4.0; Ranking: 8/135 (5.93%).

RESEARCH PROJECTS

Design of an Adjustable Neurosurgical Brain Retractor

Sponsor: Ministry of Science and Technology

Sept. 2013 - Sept. 2015

- Designed a trocar-like medical device that creates a pathway to access surgical area in the brain.
- Devised experiments with mock materials to test the applicability of the device.

Wind Lens iPBL

International Project-Based Learning with Osaka Institute of Technology

Aug. 2014

- Designed a wind turbine with an efficiency-enhancing lens and tested it in a wind tunnel.
- Led an international team in conducting research, prototyping and presenting results.
- Turbine blades were 3D printed; the lens was made from wiring plastic boards with metal wires; supporting structure designed to endure high wind velocity of up to 13.9 m/s.

WORK EXPERIENCE

National Taiwan University of Science and Technology, Taipei, Taiwan

Research Assistant

Nov. 2016 - Present

Toward the Intelligent Neurosurgical Brain Retraction Robotic System

Sponsor: National Taiwan University, National Taiwan Normal University,
and National Taiwan University of Science and Technology

- Revised previous retractor to better suit neurosurgeons' requirements.
- Designed a robotic arm that holds a brain retractor and adjusts the surgical pathway according to optical trackers on surgical instruments.

Improving Lifting Capacity of a Robotic Finger

Sponsor: Triamp Technology, LTD.

- Kinostatic analysis of existing design using MATLAB and validation with MSC ADAMS.
- Shrunk the finger mechanism to $\phi 25 \times 150$ mm while capable of lifting 1.5kg at 3 Hz.

Substitute Military Service, Ministry of Interior, Taichung, Taiwan

Element Leader

Oct. 2015 - Oct. 2016

- Prepared new recruits for their upcoming term of service.

PUBLICATIONS AND PRESENTATIONS

- Hsuan-Ping Kuan; Chin-Hsing Kuo, "Conceptual Design of a New Neurosurgical Brain Retractor," *Mechanisms, Transmissions, and Applications: Proceedings of the Third MeTrApp Conference 2015*, pp. 261-269, February 2015

SOP-生命回顧

- 1.5-3 Pages (depending on program)
- Why you? Because we match!
 - 把自己的背景、優勢、理想串成故事，說服讀者為什麼你獨一無二的適合這個program
 - Different SOP same story, but customize a section to this specific University. I.e.. Labs, environment.
 - Peer (Professor) review, natives, editor, 補習班
- Revise, revise, revise
- 資源: PTT 留學版
- Book: graduate admission essay by Donald Asher

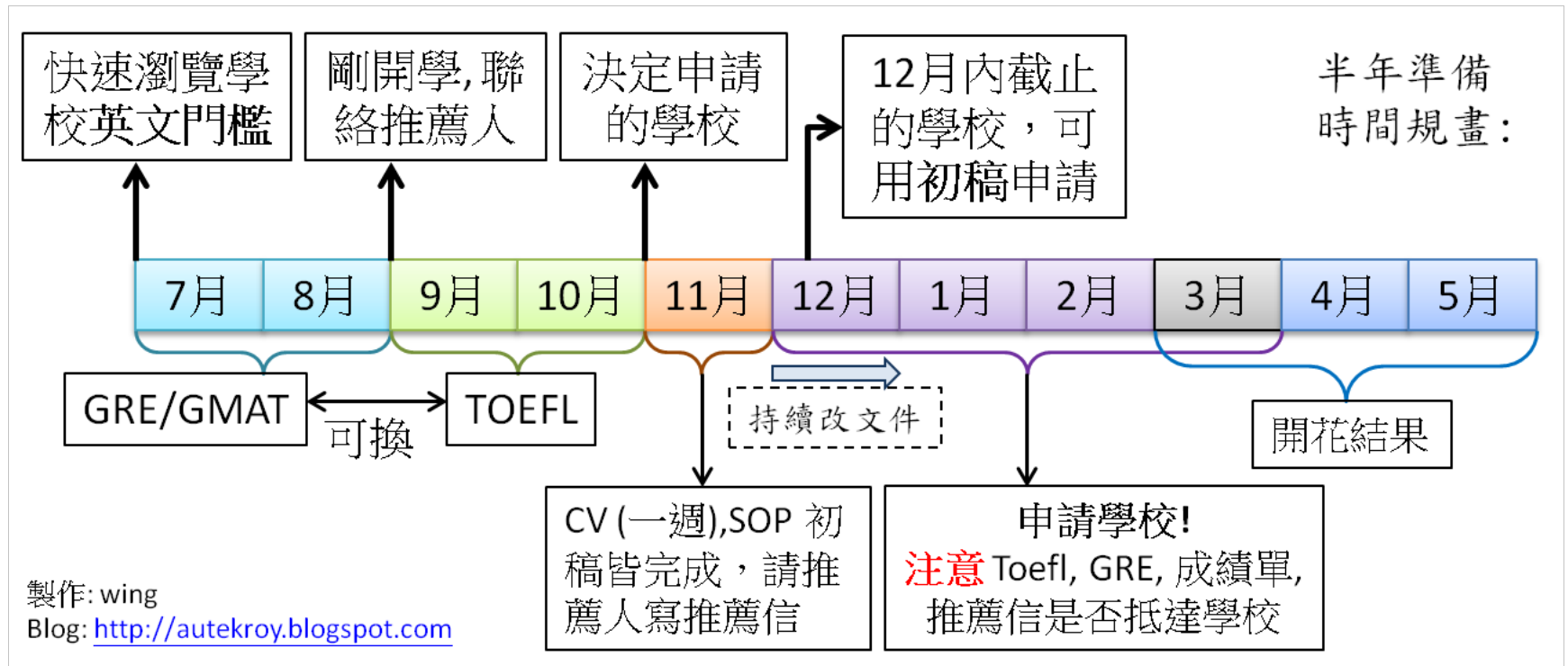
我的SOP

- 1st : Hook+研究方向
- 2nd : 專題
- 3rd : 工作經驗
- 4th : 需要什麼技能/知識達成人生目標
- 5th : 為什麼這間學校這個program, why we match?
- 6th : Career goal
- 7th : Conclusion

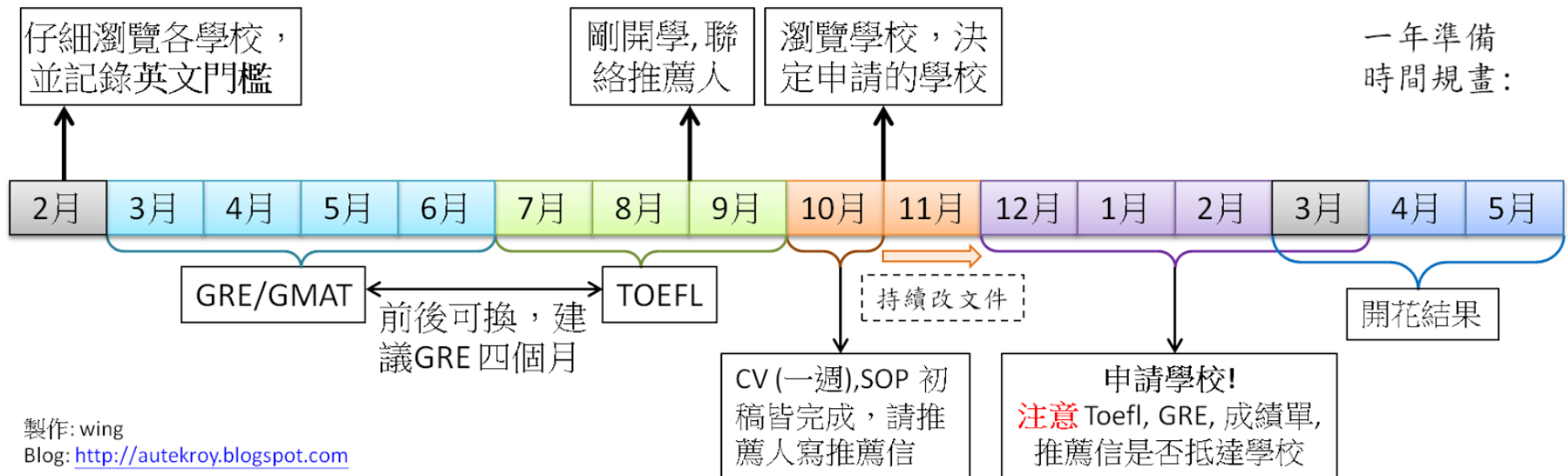
Recommendation Letter

- 2-3封
- 幾點Tips：
 - 提早詢問(2m-th)、提前提醒deadline
 - 最好內容互補並呼應SOP (若能擬稿，不能照樣寄)
 - 如何讓幫忙寫推薦信的人輕鬆一點。Ex. 擬稿、統計清單(截止日、學校、program)

Timeline - Half year



Timeline - A year



製作: wing
Blog: <http://autekroy.blogspot.com>

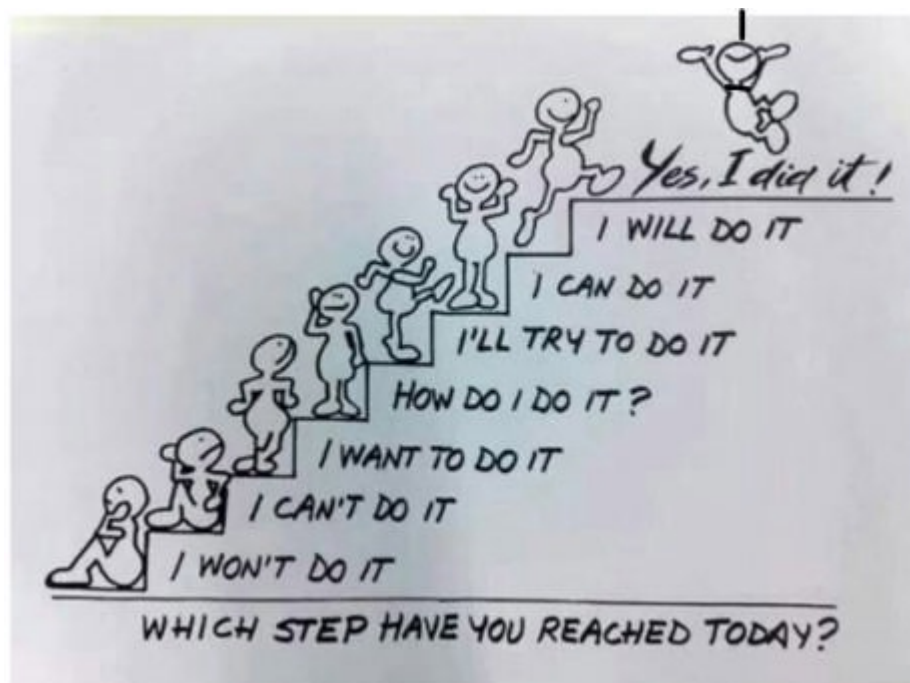
PhD Interview

- 申請MS被問要不要PhD
- 靠著掃過教授近幾年所有paper，以及不懂發問
- 用熱誠說服教授

Others

- WES 成績認證- Don't think it's worth the money.
- 寄文件- 提早寄，是的現在還是有學校要紙本
- GPA、英文不是一切，申請文件是一個package，可以靠其他彌補
- 充實的寒暑假：暑期海外研究(有可能找到未來的老闆)、實習、志工...
- 不要把雞蛋放在同一個籃子，嘗試越多方法越好
- 多認識教授：研討會、summer school、email
- 把握機會(拒絕導師3次牽線機會)
- 大5交換找實驗室
- German Visa

加油! You are half way there!



韓國都可以2比0贏德國，
這世上沒有什麼不可能的

Thank you for listening

Q&A

Major: ME

GPA: 3.82/4.0

Ranking: 8/135

GRE

321(V153/Q168/AWA3.0)

IELTS:

7.5(L8/R9/W6.5/S7)