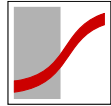**Slide 1**

> ◆ *Numerous students expressed great interest in MSc Dissertations*
> ◆ *These are very different from MSc Projects* .

Presenting Your Proposal

Techniques that they don't teach you for the MSc project

Prof. T.H. Tse
The University of Hong Kong
Pokfulam, Hong Kong

Email: **thtse@cs.hku.hk**
Web: **hku.hk/thtse** .

Slide 2

Track Record of Speaker

> ◆ *Start with something to attract the audience* .

- ◆ *Best teacher award*
- ◆ Teacher effectiveness
  94.4% in 2022
  93.2% in 2021
  96.4% in 2020
- ◆ *Supervision of Best Tutor Awards*
  - ▪ Lijun Mei
  - ▪ Jack Zhai
  - ▪ Jolly Cheng .

THE UNIVERSITY OF HONG KONG

This plaque is presented to

PROFESSOR TSUN-HIM TSE

for the

Best Teacher Award
2011–2012

in the Faculty of Engineering

Slide 3

My Presentation Strategy

> ◆ *Continue with something interesting to attract the audience*

The Boiling Frog Syndrome

- ◆ If a frog is placed in boiling water, it will jump out
- ◆ If it is placed in cold water and slowly heated, it will never jump out but boiled alive .

Slide 4

Who Do You Want to Attract ??

- ◆ *Experts* in your area of research
- ◆ *Experts* who may not be your area .

We Learn from Real Mistakes

Please excuse me if you cannot understand my talk because my English is not good

- ◆ *How attractive is this introduction ??*
- ◆ *Learn from best international presenters, not other students* .

5

Presentation Outline

- ◆ *Continue with an interesting Presentation Outline*

- ◆ Introduction
- ◆ Preliminaries
- ◆ Presentation skills
- ◆ PowerPoint presentations
- ◆ Summary and conclusion .

3 Ps

- ◆ *This is part of your slide*

6

We Learn from Mistakes of Many MSc Projects

Presentation Outline

- ◆ Introduction
- ◆ Systems analysis
- ◆ Systems design
- ◆ Implementation
- ◆ Conclusion

- ◆ *No information or attraction whatsoever*
- ◆ *Learn from best international presenters, not other students* .

7

Presentation Outline

- ◆ Introduction
- ◆ *Preliminaries*
- ◆ Presentation skills
- ◆ PowerPoint presentations
- ◆ Summary and conclusion

First Impression

You never get a second chance to make a first impression

Will Rogers, Actor
1879−1935

Even before starting with something interesting:

◆ Proper dress
◆ Title slide .

Dress Properly
According to Expectation

◆ Informal   ◆ Smart casual

Dress Properly
According to Expectation (*Continued*)

◆ Mark Zuckerburg   ◆ Same Person

Title Slide

◆ *Your presentation title is important*
◆ *Your affiliation is important*
◆ *The background of your title slide is not important* .

Presenting Your Proposal
Techniques that they don't teach you for the MSc project

Prof. T.H. Tse
The University of Hong Kong
Pokfulam, Hong Kong

Email: thtse@cs.hku.hk
Web: hku.hk/thtse .

Your Presentation Title: Example 1

- Testing of Context-Aware Applications — **Too general**
- A Metamorphic Approach to Integration Testing of Context-Aware Middleware-Based Applications — **Too long**
- Integration Testing of Context-Aware Middleware-Based Applications: *a Metamorphic Approach* — **Add subtitle** .

Your Presentation Title: Example 2
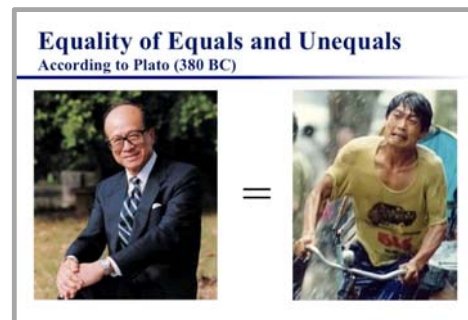## Add Interesting Subtitle

Presenting Your Proposal:
Techniques that they don't teach you for the MSc project .

14

Your Presentation Title: Example 3
Add Interesting Main Title

Equality to Equals and Unequals:
A Revisit of the Equivalence and Nonequivalence Criteria in Class-Level Testing of Object-Oriented Software

15

Your Presentation Title: Example 4
Add Interesting Acronyms

- *CHOC'LATE:* a CHOiCe-reLAtion framework for TEst case generation
- *DESSERT:* a DividE-and-conquer methodology for identifying categorieS, choiceS, and choicE Relations for Test case generation
- *MINTS:* MINimum Test Suites
- *TIRAMISU:* Testing context-sensItive, concurRent And MIddleware-baSed Ubiquitous software
- *TRIFL:* TowaRds Improved techniques for Fault Localization .

Your Affiliation is Important

- University of HK *??*
- University of Hong Kong **??**
- The University of Hong Kong *??*
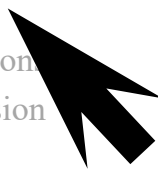- *The University of Hong Kong, Pokfulam, Hong Kong* .

HK is not as well known as USA

Which University of Hong Kong ??

We Learn from Real Mistakes
Background of Title Slide *Not* Important

- *Complex background distracts attention*
- *Learn from modern design: Keep it simple* .

Presentation Outline

- Introduction
- Preliminaries
- *Presentation skills*
- PowerPoint presentation
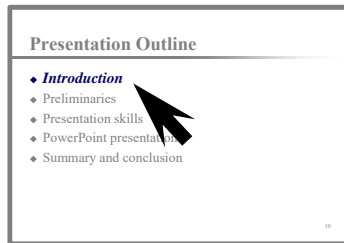- Summary and conclusion

---

Main Presentation Skill

- Tell them what you are going to say
- Tell them
- Tell them what you said

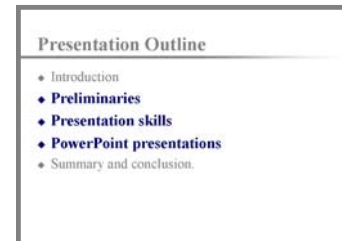*Tell them x 3* .

Main Presentation Skill
Implementation

◆ *Tell them what you are going to say*

Presentation Outline
- *Introduction*
- Preliminaries
- Presentation skills
- PowerPoint presentations
- Summary and conclusion

Main Presentation Skill
Implementation (*Continued*)

◆ Tell them what you are going to say

◆ *Tell them*

Presentation Outline
- Introduction
- **Preliminaries**
- **Presentation skills**
- **PowerPoint presentations**
- Summary and conclusion.

Main Presentation Skill
Implementation (*Continued*)

◆ Tell them what you are going to say

◆ Tell them

◆ *Tell them what you said*

Presentation Outline
- Introduction
- Preliminaries
- Presentation skills
- PowerPoint presentations
- *Summary and conclusion*
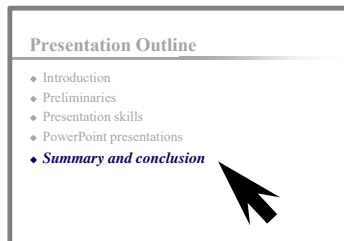
Speaker-Oriented Presentation

◆ *You* lead the presentation
- *Face* the audience
- *Deliver* a message
- *Provide* the content

◆ *Argue your points*

◆ *Persuade the audience*

◆ *Promote your work*

◆ The slides *support* you
- *Arouse* interest
- Give *visual* messages
- Help *signposting* .

Speaker-Oriented Presentation (*Continued*)

- ◆ Speak to audience *directly*
- ◆ *Speak*, not read
- ◆ Ensure *eye contact*
- ◆ Control the slides *yourself*
- ◆ *Don't* allow other team members to act as wallpaper
- ◆ *Don't* use cue cards
- ◆ *Memorize* the sequence
- ◆ Add *hidden cues* .

| *Like this* |

Presentation Outline

- ◆ Introduction
- ◆ Preliminaries
- ◆ Presentation skills
- ◆ *PowerPoint presentations*
- ◆ Summary and conclusion

PowerPoint Presentations

| *Many challenges* |

Equipment control

- ◆ Unfamiliarity of equipment setting is *your* fault
- ◆ Get familiar *well before* presentation
    - ▪ Book the room for rehearsal *days* before the talk
    - ▪ Know how to *dim* lights
    - ▪ Know how to use *microphone*
- ◆ Equipment breakdown is *your* fault
- ◆ Ask fellow student to bring a *rehearsed* notebook .

PowerPoint Presentations
Highlighting

- ◆ *Never* use laser pointers
- ◆ *Avoid* mouse pointers
- ◆ Use prepared pointers
- ◆ Use animation
- ◆ Use callouts

| *Like this* . |

Unbalanced PowerPoint List

- *Assertion Checking*
  - Da, Domine, propitius pacem in diebus nostis, ut, ope misericordiae tuae adiuti, et a peccato simus semper
  - Ut unum Deum in Trinitate, et Trinitatem in unitate veneremur
  - Defende nos in proelio; contra nequitiam et insidias diaboli esto praesidium
- *Metamorphic Testing*
  - Actiones nostras, quaesumus Domine, aspirando .

Balanced PowerPoint List

- *Assertion Checking*
  - Da, Domine, propitius pacem in diebus nostis, ut, ope misericordiae tuae adiuti
  - Ut unum Deum in Trinitate, et Trinitatem in unitate veneremur
- *Metamorphic Testing*
  - Defende nos in proelio; contra nequitiam et insidias diaboli esto praesidium
  - Actiones nostras, quaesumus Domine, aspirando praeveni et adiuvando prosequere .

Unbalanced Lists for Special Effect

- *Disadvantage of Metamorphic Testing*
  - Ut unum Deum in Trinitate, et Trinitatem in unitate veneremur

- *Advantages*
  - Da, Domine, propitius pacem in diebus nostis
  - Ut, ope misericordiae tuae adiuti
  - Defende nos in proelio
  - Contra nequitiam et insidias diaboli esto praesidium
  - Actiones nostras, quaesumus Domine
  - Aspirando praeveni et adiuvando prosequere .

Referring Backwards

- *Assertion Checking*
  - Advantages ...
  - Disadvantages ...
  - Costs ...

Referring Backwards

◆ *Metamorphic Testing*

  ■ Advantages ...

  ■ Disadvantages ...

  ■ Costs

> ***When referring backwards, do not return to previous slide*** .

Referring Backwards

Comparing the Advantages:

Referring Backwards	Referring Backwards

◆ **Assertion checking**
  ■ **Advantages ...**
  ■ Disadvantages ...
  ■ Costs ...
	◆ **Metamorphic testing**
	  ■ **Advantages ...**
	  ■ Disadvantages ...
	  ■ Costs ...

Prepare PowerPoint Slides by Iterations
First Attempt

◆ Comprehensive

◆ Disciplined

◆ Practical

◆ Professional

> ***Too vague*** ...

Prepare Slides by Iterations
Second Attempt

> ***Too tiny*** ...

Comprehensive

◆ Da, Domine, propitius pacem in diebus nostis, ut, ope misericordiae tuae adiuti, et a peccato simus semper liberi et ab omni perturbatione securi

Disciplined

◆ Ut unum Deum in Trinitate, et Trinitatem in unitate veneremur

Practical

◆ Defende nos in proelio; contra nequitiam et insidias diaboli esto praesidium

Professional

◆ Actiones nostras, quaesumus Domine, aspirando praeveni et adiuvando prosequere: ut cuncta nosta oratio et operatio a te semper incipiat et per ta coepta finiatur.

Third Attempt

Recommended

Third Attempt

We are comprehensive

◆ Da, Domine, propitius pacem in diebus nostis, ut, ope misericordiae tuae adiuti, et a peccato simus semper liberi et ab omni perturbatione securi

---

Third Attempt

We are comprehensive

We are disciplined

◆ Ut unum Deum in Trinitate, et Trinitatem in unitate veneremur

---

Third Attempt

We are comprehensive
We are disciplined

We are practical

◆ Defende nos in proelio; contra nequitiam et insidias diaboli esto praesidium

Prepare Slides by Iterations
Third Attempt

*We are comprehensive*

We are disciplined

We are practical

We are professional

◆ Actiones nostras, quaesumus Domine, aspirando praeveni et adiuvando prosequere: ut cuncta nosta oratio et operatio a te semper incipiat et per ta coepta finiatur .
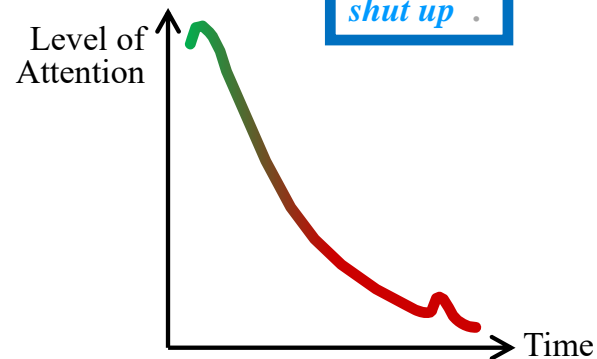
Presentation Outline

◆ Introduction

◆ Preliminaries

◆ Presentation skills

◆ PowerPoint presentations

◆ *Summary and conclusion*
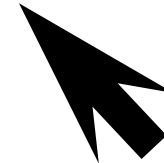
Timing

Stand up,
speak up,
shut up .

Level of
Attention

Time

Summary and Conclusion

◆ *Preliminaries*
   ▪ Visibility
   ▪ Networking

Summary and Conclusion

◆ Preliminaries

◆ *Presentation skills*

  ▪ First impression
  ▪ Tell them × **3**
  ▪ You *lead* the presentation, *supported* by the slides

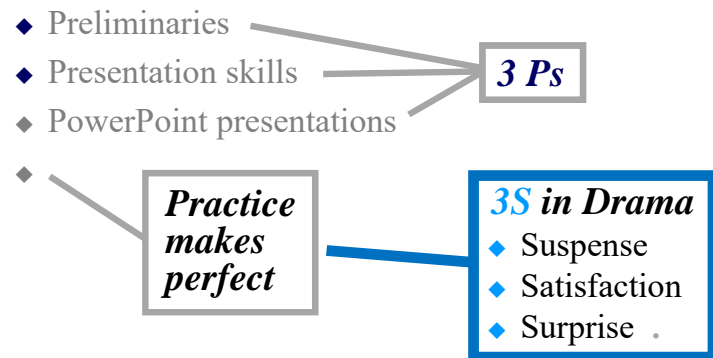## Summary and Conclusion

◆ Preliminaries

◆ Presentation skills

◆ *PowerPoint presentations*

  ▪ *Highlighting*
  ▪ *Balanced* lists
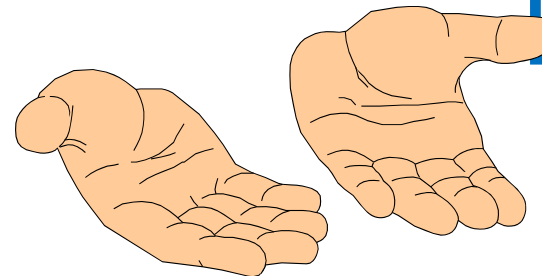 ▪ Referring *backwards*
  ▪ Preparing by *iterations*

Summary and Conclusion

◆ Preliminaries

◆ Presentation skills

◆ PowerPoint presentations

◆

3 Ps

Practice makes perfect

3S in Drama
  ◆ Suspense
  ◆ Satisfaction
  ◆ Surprise .

Your Comments are Welcome

◆ *Better than Q&A*

◆ *Shows your confidence* .

Thank you

Hang on:

◆ *Put potential Q&A slides after this, just in case* .

What Do You Do When Attending Talks and Meetings *??*

◆ Listen very carefully and take notes?

◆ Do excellent presentations

◆ Think of in-depth questions to discuss with the speakers

◆ *Visibility*

◆ *Networking* .