

中小學
Primary &
Secondary Schools

校園發明大賽

INVENTION FOR SCHOOLS CONTEST

Competition Briefing 比賽簡介

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Organizer and Supporting Organization

主辦單位及支持機構

- Faculty of Engineering, The University of Hong Kong
香港大學工程學院
<http://engg.hku.hk/>
- Supported by HKU Knowledge Exchange Fund
香港大學知識交流基金資助
<http://www.ke.hku.hk/>
- Supported by RS Components Ltd
支持機構 RS Components Ltd
<http://hken.rs-online.com/web/>



Objectives 目的

- To enhance participants' understanding of application of information technology
推廣學生在資訊科技應用
- To promote the realisation of novel designs and innovative ideas
鼓勵學生實踐創新科技及創意設計的意念

Categories 參賽組別



- Primary School 小學組
- Secondary School 中學組



Requirements 作品要求

- Invention for school: An invention made by low-cost credit card-sized computers, such as Raspberry Pi and Arduino, that can be used in schools.

校園發明裝置：利用便宜的卡片式電腦如樹莓派、Arduino等製作一件應用於校園的裝置



Requirements 作品要求 R-01 R-02

- R-01 The invention should be a device that is useful for daily use in school.
作品需能於校園應用。
- R-02 The invention can be a device that can be applied directly in school or a prototype or a model that demonstrates an innovative idea.
作品可以是一台能直接應用於校園的裝置；或是一台能夠展示作品構思的模型。

Requirements 作品要求 R-03



- R-03 There is no restriction on the choice of materials for the invention. The cost for the design and fabrication of the device, excluding computers (for data archival and analysis, if applicable), should be **less than HKD 2000**. There will be **no** subsidy from organizers.

作品的材料並沒有限制，所需費用應**少於港幣2000元**（電腦設備等除外）。主辦單位並**不會**給予金錢上的補助。

Requirements 作品要求 R-04



- R-04 The report should be concise, preferably with a length of **no more than 10 pages** (cover page excluded, diagrams included). Submission of soft copy-only report in PDF format is encouraged, and should be included in the CD-ROM or DVD-ROM containing other deliverables. In case a hard copy report is produced, it should be printed on A4-sized paper.

文字報告宜言簡意賅，**不可多於十頁**（包括圖表,不包括封面頁）。主辦單位鼓勵提交PDF格式的報告,可存於CDROM或DVD-ROM內。如欲遞交列印本，請列印於A4紙上。

Requirements 作品要求 R-05



- R-05 **Digital photos of the invention** should be delivered, on CDROM or DVD-ROM, together with the report, on or before the deadline of submission.

提交報告時亦需提交**參賽作品之照片**（不多於十張），請存於CDROM或DVD-ROM內遞交。

Requirements 作品要求 R-06 R-07



- R-06 Each group will be allocated **15 minutes** for **presentation**. Participants are suggested to spend about 10 minutes for presentation and/or demonstration, and 5 minutes for questions and answers from the judges. VGA connection and a computer with projection facility will be provided at the presentation room.
每隊的**出席介紹**為**十五分鐘**。建議參賽者利用約十分鐘介紹及演示其作品，五分鐘解答評審團的問題。場館會提供VGA連接埠、電腦及投影機。
- R-07 Submission of deliverables should be sent to the specified address, otherwise it will not be entertained.
作品需提交到指定收集地點。主辦單位不會於其他地點收集作品。

Submission 提交作品



- An invention for school 裝置
- A report 文字報告
- Photos of the invention 作品照片 CD-ROM或DVD-ROM
- Deliverable submission form 提交作品表格
- Software 軟件
- Submission Deadline 提交作品限期:
2016-05-03[Tue] 17:30

Presentation Session 作品簡報



- Each group must attend the presentation session.
各隊必須出席作品簡報介紹參賽作品。
- Each group will be allocated 15 minutes for presentation.
每隊的出席介紹為十五分鐘。
- Each group have to submit the soft copy of the presentation slides on the day of Presentation Session.
各隊須於簡報當天提交簡報之檔案。
- The schedule of presentation session will be announced after the submission deadline.
作品簡報時間表將於提交作品限期後公佈。

Judging Criteria 評審準則

- J-01 **Research 報告內容**

Content of report, design, data collection and testing methodologies.

報告內容、背景資料、設計概念、數據搜集及測試方法。

- J-02 **Innovation 創意**

How innovative ideas have been applied in the invention for school. 裝置的創意。

- J-03 **Practicability 實用性**

How practical the invention is in school.

裝置的實用性。

- J-04 **Presentation 介紹技巧**

Performance in the project presentation session.

參賽隊伍的介紹技巧。

Awards 獎項



- Champion 冠軍
- First Runner-up 亞軍
- Second Runner-up 季軍
- The Most Innovative Invention for School Award 最佳創意獎
- The Most Practical Invention for School Award 最實用校園發明獎
- The Best Presentation Award 最佳演繹獎
- Merit 優異獎
- Certificate of Participation 參與證書



Certificate of Participation 參與證書

- Certificate of Participation will be presented to each member of the team if the team has:
 - submitted the invention; and
 - attended the presentation (at least one member of the team)
- 符合以下要求的隊伍，其隊員皆可獲頒參與證書一張：
 - 於限期前提交作品及
 - 出席作品介紹



Certificate of Attendance 出席證書

- Certificate of Attendance will be presented to participants if:
 - his/her team is eligible for receiving the Certificate of Presentation; and
 - attended the corresponding event.
- 符合以下要求的參加者可獲頒該活動的出席證書：
 - 符合獲頒參與證書的要求及
 - 曾出席該活動。

Results and Award Presentation

結果公佈及頒獎



- Tentatively scheduled on 2016-05-21 [Sat].
頒獎典禮暫定於二零一六年五月二十一日（星期六）舉行。
- At least one member of the group is required to attend the Award Presentation Ceremony.
各隊必須派至少一位組員出席頒獎典禮。
- Certificates of Participation will be awarded to all the participants.
參與證書將於頒獎典禮頒發。
- Results will be announced.
比賽結果將於頒獎典禮上公佈。



Upcoming events 活動預告

- **2015-11-14[Sat]**
 - **am** Talk on “Basic Raspberry Pi”
「樹莓派入門」講座
 - **pm** Talk on “Basic Arduino”
「Arduino入門」講座

- **2015-12-05[Sat]**
 - **am** Talk on “Intermediate Raspberry Pi”
「樹莓派進階」講座
 - **pm** Talk on “Intermediate Arduino”
「Arduino進階」講座

Links 連結



- Competition website 比賽網頁

<http://www.cs.hku.hk/~i4s/>

- Facebook page 專頁



<https://www.facebook.com/InventionForSchools>



- Facebook group

<https://www.facebook.com/groups/InventionForSchools/>

- Email 電郵



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Thank you 謝謝

Questions? 問題?

