

可視光通信を使った美しい温度計づくり

2015 Visible Light Communication International Design Workshop

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本研究の目的

モノのIoTという言葉が流行しすべてのモノがインターネットにつながる時代が来ている。従来の温度計といえば、シンプルな形に温度の表示がされているだけである。LED可視光通信は、低速の美しい光の点滅を目にとらえることができる。これは美術家やデザイナーにとって革命的な創造につながる。可視光通信を使いスマホで温度表示をさせる美しい温度計を作りたい。しかしC言語プログラムや高度なハードウェアは一般には難しい。ルネサスエレクトロニクス社GR-KURUMIにカシオ計算機社の信号化されたLEDを搭載したピンクの基板が2014年秋誕生した。筆者は教材用ITキッドを制作し台湾の国立雲林科技大学で30名の学生に、温度の哲学的考察、LEDを美しく見せる造形の制作をさせた。スマホやアイパッド、アイホン5以上で温度表示がなされる。表示と造形が分離したのである。新しい造形の世界が広がる世界初の授業となった。本展示発表ではこの制作プロセス作品の全貌を発表する。

ルネサスエレクトロニクス社・カシオ計算機社・国立情報学研究所橋爪研究室の協力により実現したこと深く感謝したい。なお台湾の同大学から筆者と上記関係企業と研究所にも感謝状が贈られた。同大学参加学生、国際交流協定での岡山県立大学の協力にも感謝する。 文責 児玉由美子

2015 Visible Light Communications International Design Workshop has held in National Yunlin University of Science and Technology (YunTech), Yunlin, Taiwan on June 12 ~ 15, 2015. There're 30 participants from various universities in Taiwan. In 3 days of activities, the participants could learned "visible light communication" and "experiment of form development", and enhance interest in learning.



The workshop invited Okayama Prefectural University's prof. Yumiko Kodama who is expertise in comprehensive arts, environmental art and technology art. Prof. Kodama has bring a wonderful keynote speech and creative guide. The participants are design a works combined with "visible light communication."



Choco plate

Yi-Ting Lin, Ya-Chih Wu

We consider that what the situation is sensitive with temperature? and we found chocolate need the best temperature for cold storage and delicious tasting. So, we think it from the temperature is very particular about in all stages. The cold storage temperature of chocolate and the best tasting temperature have 5~10°C ranges, so we design a plate for customer tasting in shop. It's called "Choco Plate." When chocolate take out from the refrigerator (cold storage temperature is more cold), put it on the "Choco Plate," and back to the seats to wait the chocolate gradually warming up to the delicious tasting temperature. In the process, we could using our smartphone(or device) to check the temperature. It's not only let the measuring temperature more meaning, but also have an interesting experience before we eating.



DISCO Kurumi

Sieng-Hou Chen, Rui-Ting Hong, Yi-Chen Hsu

We want to give "read indoor temperature" a story. Because of the Indoor temperature isolated external factors, so the biggest variable comes from user - people. People's temperature affected by the interpersonal relationship, so we choose the DISCO for the expression, it not only could expression the interactive between people and people, but also respond to two original concepts - Flash Rationalization and Reflection Light.



Analyzing

Chao-Yin Lin, Yan-Yi Lin, Hui-Chung Yang

"Analyzing" is design for the 2020 Tokyo Olympic Games check in place. The slogan is "Show you fever." five colors on the petals are the color of the five continents, the main visual form is representative of Japan's Cherry blossoms (Sakura), and it could think of the Olympics logo. The petal is design from blades concept, it could rotated manually.



My Heart 28°C

Cheng-Wei Lai, Wei-Hao Hiew, Ting-Kai Chang

Surprise always makes warm feeling, when we open the box instant, the flashing colors represent my love for you. Touch the future with each other, I use my temperature touched you, and you will love this temperature into eternity. I Love You. 28°C



Participants could operate the interactive wafer through the smartphone apps "picapicamera." In the cases, the participants learned through the visible light communication to send and reception the information, that is break the distance limit and tradition QR code's interactive method.

