



ROYAL UNIVERSITY OF PHNOM PENH
FACULTY OF ENGINEERING



Preparation on Smart Grid development in the Faculty of Engineering, RUPP

By Dr. Srun Sovila

Presenter: Dr. Tharoeun Thap

03-Dec-2019

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The Faculty of Engineering

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Student's Project on Related Fields

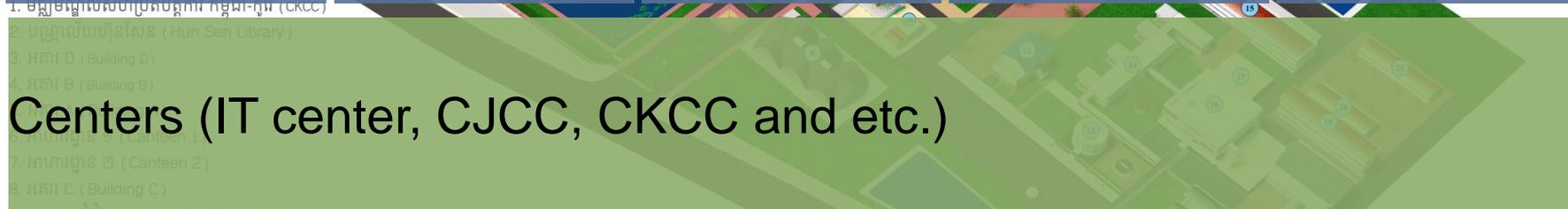
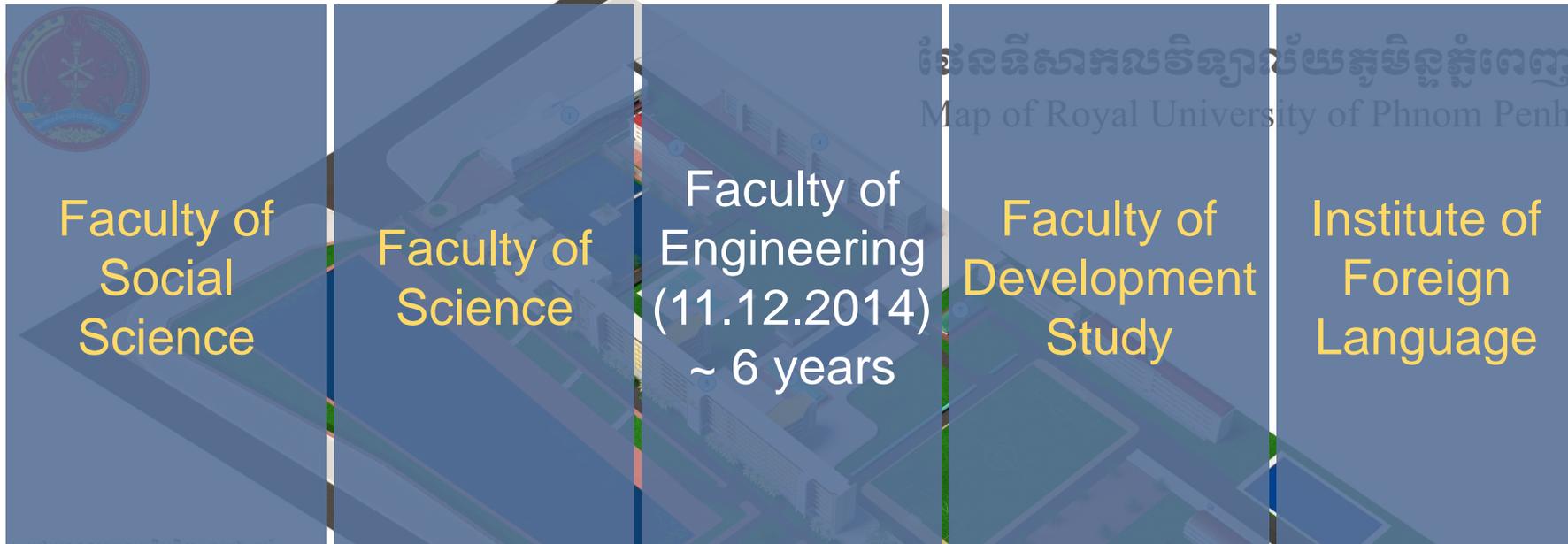
3

Department of Electrical Engineering

4

What you could help and cooperate

Royal University of Phnom Penh (RUPP) Current Profile (Division)



1. មជ្ឈមណ្ឌលសេចក្តីប្រតិបត្តិការ កម្ពុជា-ហ្វារ (CKCC)
2. បណ្ណាល័យហ៊ុនសែន (Hun Sen Library)
3. អគារ D (Building D)
4. អគារ B (Building B)
5. បណ្ណាល័យភាសាបារាំង (French Library)
7. អាហារដ្ឋាន ២ (Canteen 2)
8. អគារ C (Building C)
9. សាលប្រជុំជបូលេទុក (Auditorium Hall)
10. ភោជនីយដ្ឋាន Blend Cafe
11. អគារ T (Building T)
12. អគារដឹកនាំម៉ុងប្រព័ន្ធផ្សព្វផ្សាយ និងសារគមនាគមន៍ (DMC)
13. បណ្ណាល័យភាសាបារាំង (French Library)
14. អគារ D (Building D IFL)
15. អគារ C (Building C IFL)
16. អគារ E (Building E IFL)
17. អាហារដ្ឋាន IFL (Canteen IFL)
18. មជ្ឈមណ្ឌលសហប្រតិបត្តិការ កម្ពុជា-ជប៉ុន (CJCC)
19. អគារ G (Building G IFL)
20. អគារ A (Building A IFL)
21. អគារ B (Building B IFL)



Faculty of Engineering

established in 11.Dec.2013 (6 years)

- Departments:
 - Telecommunication & Electronic Engineering
 - Information Technology Engineering
 - Bio-Engineering
- Lecturers & researchers
 - 8 (PhD) + 15 (MS) staff,
and 5 part-time staff
- Students about 800 totally

Future Plan at the Faculty of Engineering

- Establish three more department by 2021
 - Electrical Engineering
 - Urban Science & Architectural Engineering
 - Industrial Engineering
- Strengthen collaboration with Partners, especially industrial
- Research should be oriented on social & community problems

Student's Thesis on

Modeling System of Solar Energy to Minimize the Peak Energy from the Grid



សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ
ROYAL UNIVERSITY OF PHNOM PENH

ប្រព័ន្ធផ្តំខែលនៃការផលិតថាមពលព្រះអាទិត្យ
ដើម្បីធ្វើឱ្យការប្រើប្រាស់ថាមពលអគិបមេត្រី Grid ថយចុះ

Modeling System of Solar Energy to Minimize
the Peak Energy from the Grid

សារណាមណ្ឌប់ថ្នាក់បរិញ្ញាបត្រ

A Thesis

In Partial Fulfillment of the Requirement for Bachelor Degree of
Electronic and Telecommunication Engineering

ជា នារាយ័ម

CHEA NAKHIM

July 2018



សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ
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**ការរចនាប្រព័ន្ធគ្រប់គ្រងគ្រឿងគ្រឿងអេឡិចត្រូនិចនៅក្នុងផ្ទះ
ដោយផ្អែកលើមូលដ្ឋាន IoT**

The Design of a Home Appliances Controlling System
Based on Internet of Things (IoT)

របាយការណ៍បញ្ចប់ថ្នាក់បរិញ្ញាបត្រ
វិស្វកម្មទូរគមនាគមន៍ និងអេឡិចត្រូនិច

A Final Report
In Partial Fulfilment of the Requirement for the Degree of
Bachelor in Telecommunications and Electronics Engineering

Lim Chhayly

June 2019



សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ
ROYAL UNIVERSITY OF PHNOM PENH

**ការអភិវឌ្ឍន៍លើ Raspberry Pi Board សម្រាប់ការអប់រំលើគម្រោង
ទូរគមនាគមន៍ និង អេឡិចត្រូនិច**
Development on Raspberry Pi Board for Education on
Telecommunication and Electronic project

គម្រោងបញ្ចប់ថ្នាក់បរិញ្ញាបត្រ វិស្វកម្មទូរគមនាគមន៍ និងអេឡិចត្រូនិច
A Research Report
In Partial Fulfilment of the Requirement for the Degree of Bachelor of
Telecommunication and Electronic Engineering

July 2019



សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ
ROYAL UNIVERSITY OF PHNOM PENH

**ការសិក្សាលើគម្រោង IoT ដោយប្រើប្រាស់ Microcontroller
សម្រាប់ការអប់រំលើផ្នែកទូរគមនាគមន៍**
Microcontroller Based IoT Projects for Education Purpose on
Telecommunication

គម្រោងបញ្ចប់ថ្នាក់បរិញ្ញាបត្រវិស្វកម្មទូរគមនាគមន៍ និងអេឡិចត្រូនិច
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KAO Sethkosol

July 2018



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ROYAL UNIVERSITY OF PHNOM PENH

**កម្មវិធីទូរស័ព្ទដៃសម្រាប់មធ្យោបាយធ្វើដំណើរការមរតក
សាធារណៈក្នុងរាជធានីភ្នំពេញ**
Mobile Application for Phnom Penh Public Transportation

A Thesis
In Partial Fulfilment of the Requirement for the Degree of
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សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ
ROYAL UNIVERSITY OF PHNOM PENH

**ការគ្រប់គ្រងផ្លូវសញ្ញាចរាចរណ៍ដោយប្រើប្រាស់ Raspberry Pi 2
ដើម្បីសម្រួលចរាចរណ៍**

Raspberry Pi 2 Control Traffic Light Based Traffic Density for Solving Traffic Problem

គម្រោងបញ្ចប់ថ្នាក់បរិញ្ញាបត្រវិស្វកម្មទូរគមនាគមន៍ និង អេឡិចត្រូនិច
A Final Report
In Partial Fulfilment of the Requirement for the Degree of
Bachelor of Telecommunication and Electronic Engineering

សេង ចាន់ណារ៉ា ឈុន ប៊ុនហេង ហម ហ្វឺនេក
Seng Channara Chhun Bunheng Horn Sreyneak

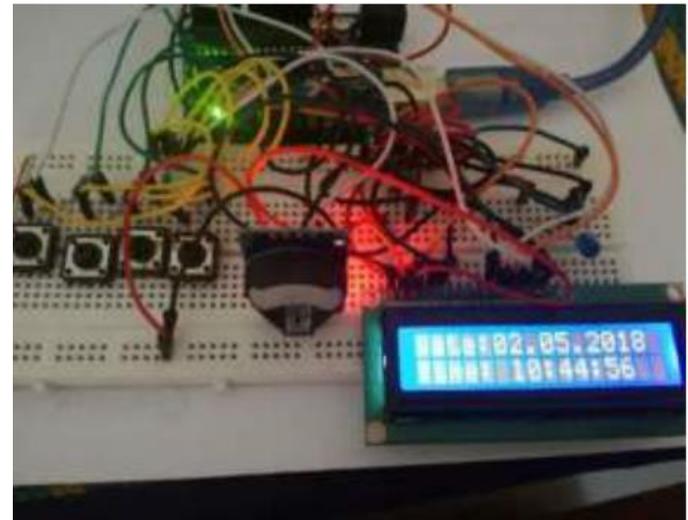
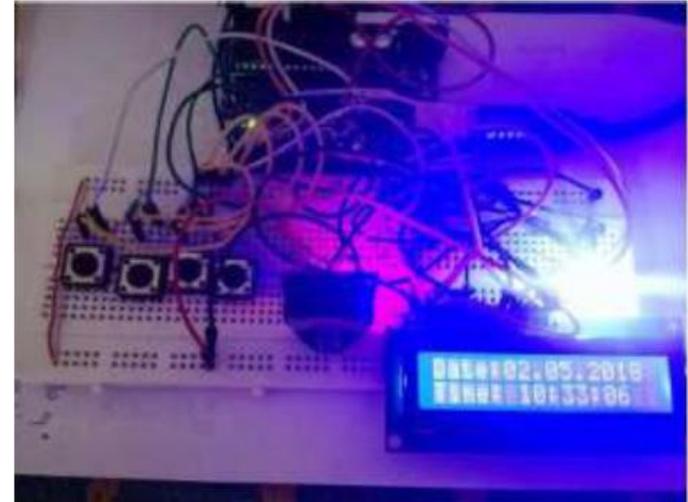


សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ
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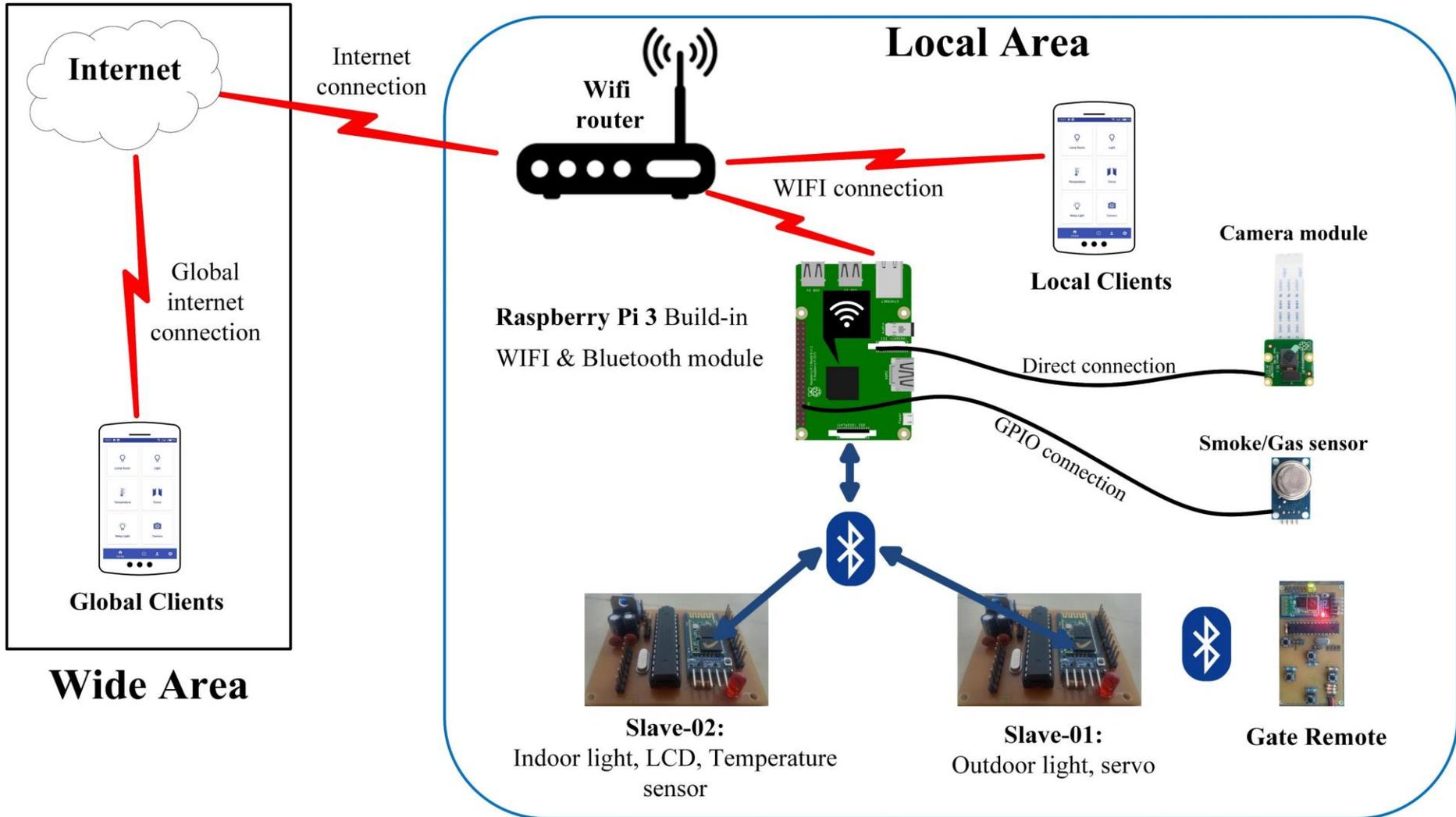
ការសិក្សាពីការអភិវឌ្ឍន៍ EMI/EMC នៅក្នុងប្រព័ន្ធគ្រប់គ្រង
Study on Development of EMI/EMC in Smart System

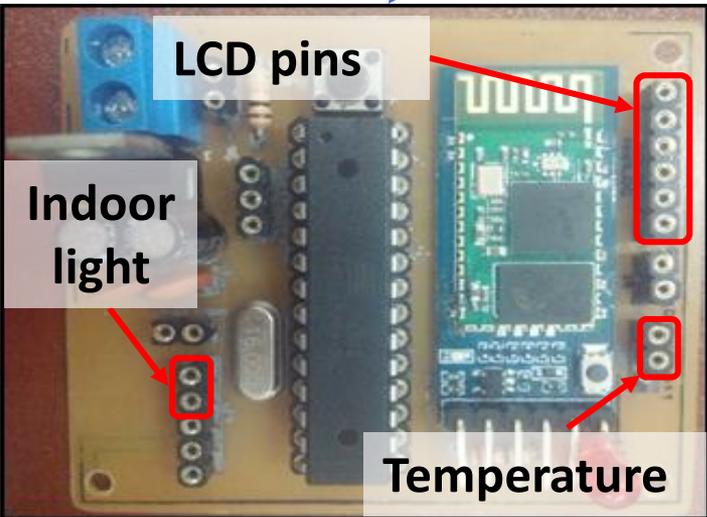
A Thesis
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Turn the Relay ON/OFF via Time Setting

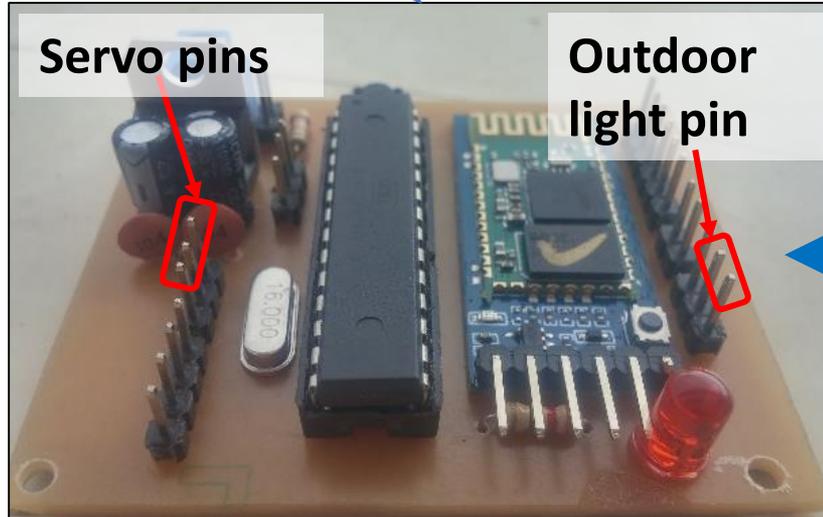


IoT Project

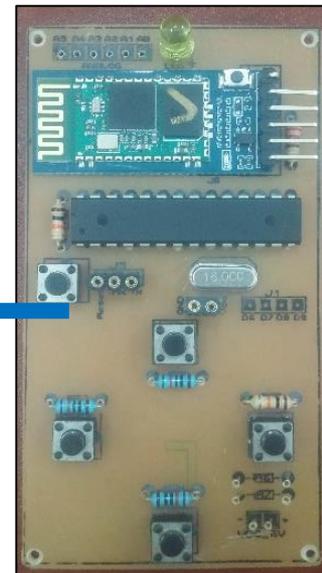




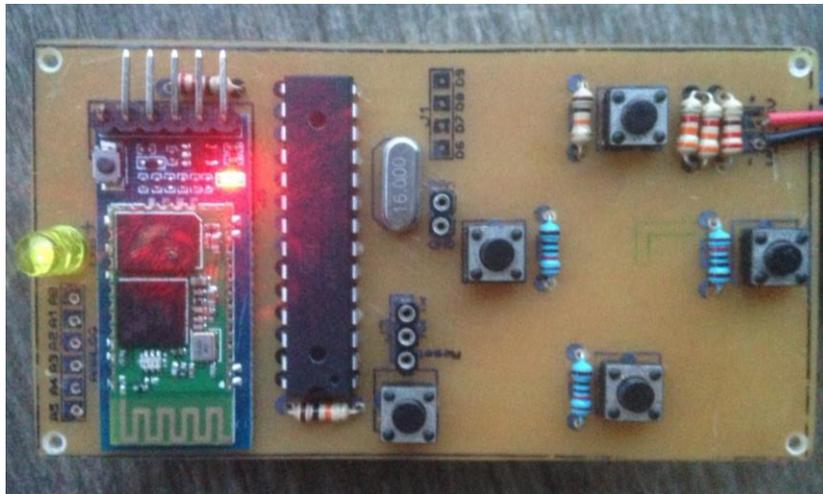
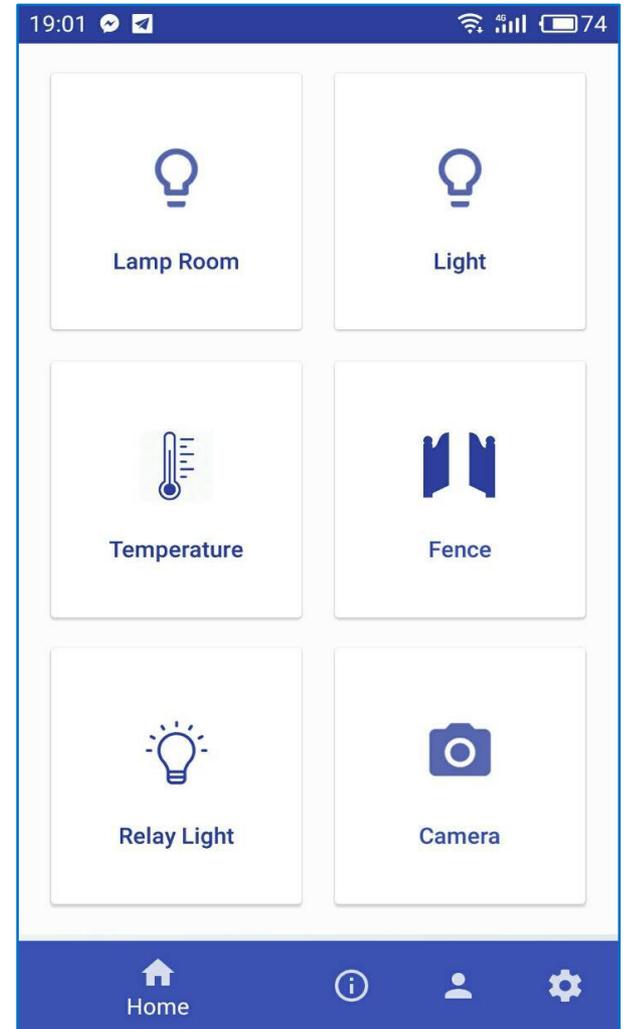
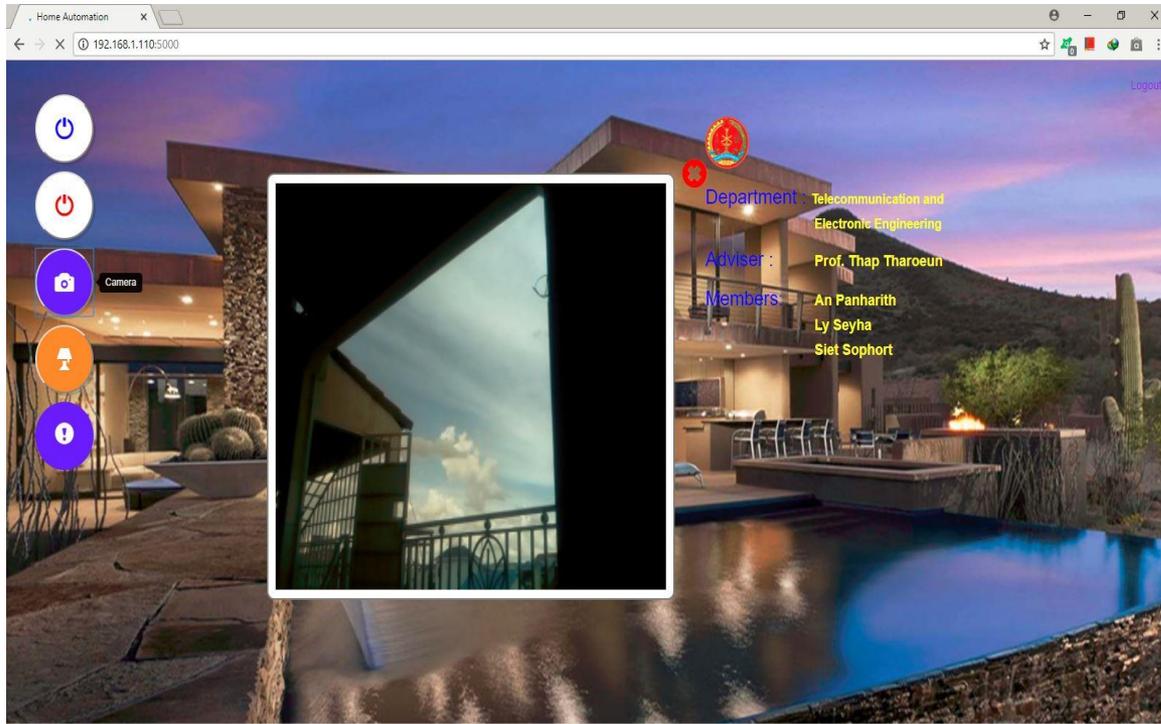
Slave02: Temperature, LCD & indoor Light



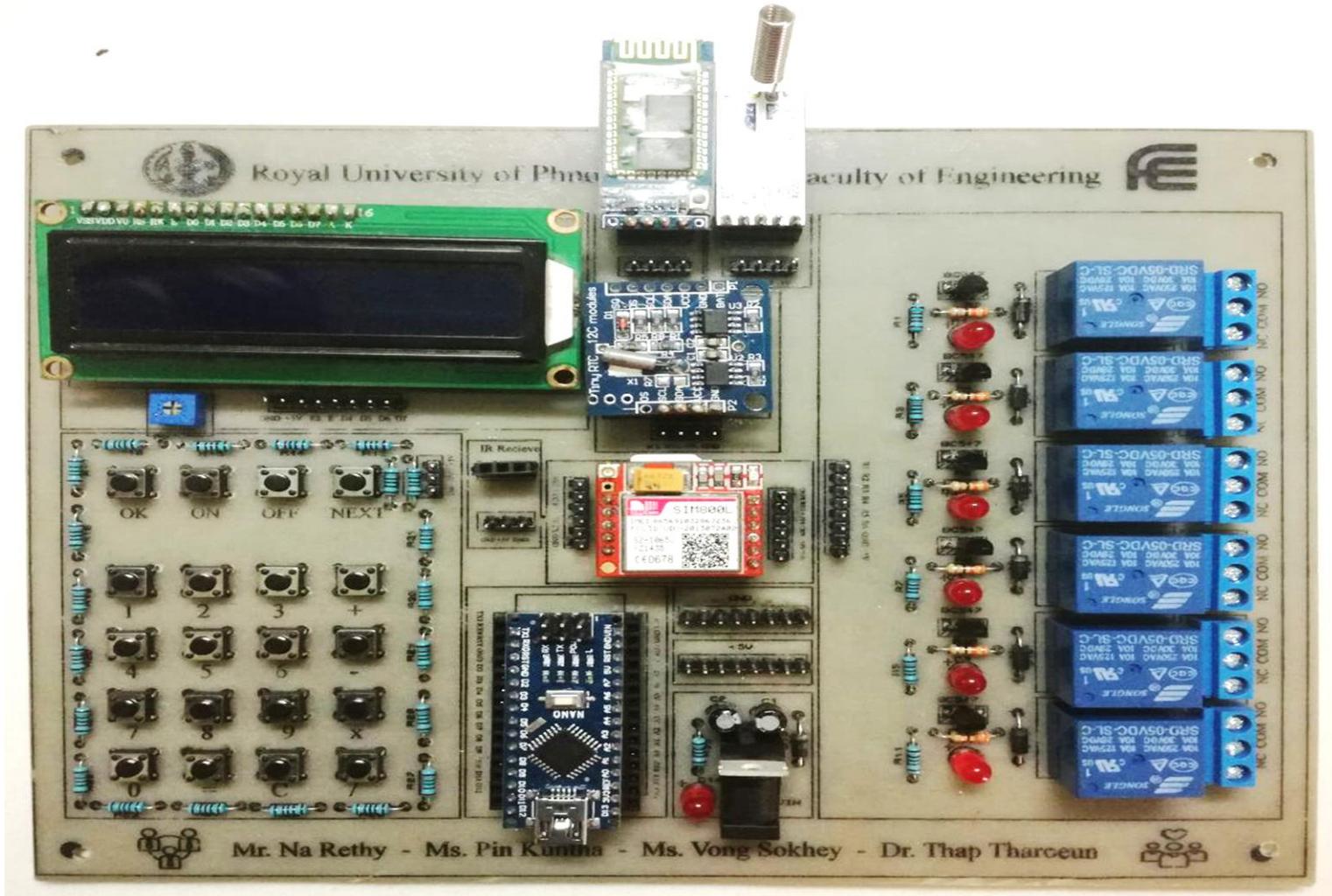
Slave01: Gate + Outdoor Light

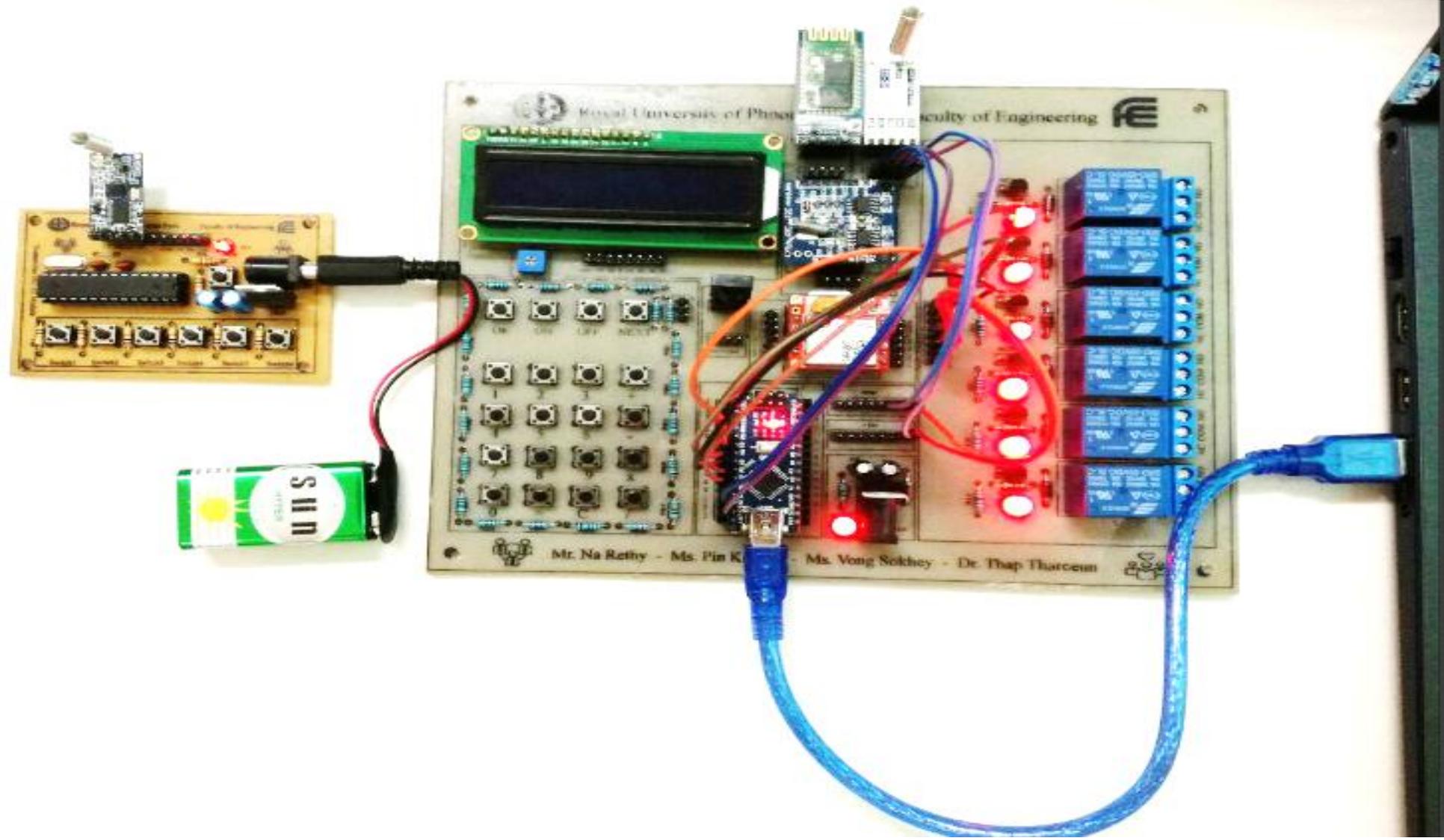


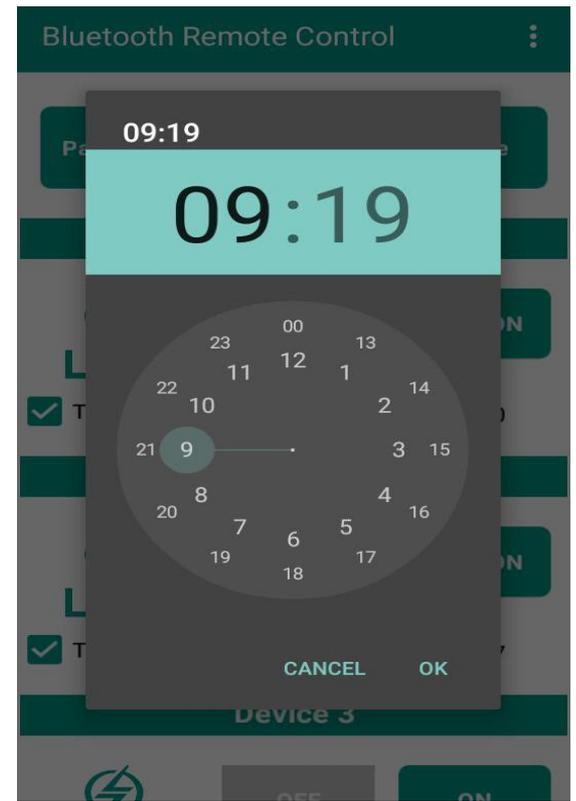
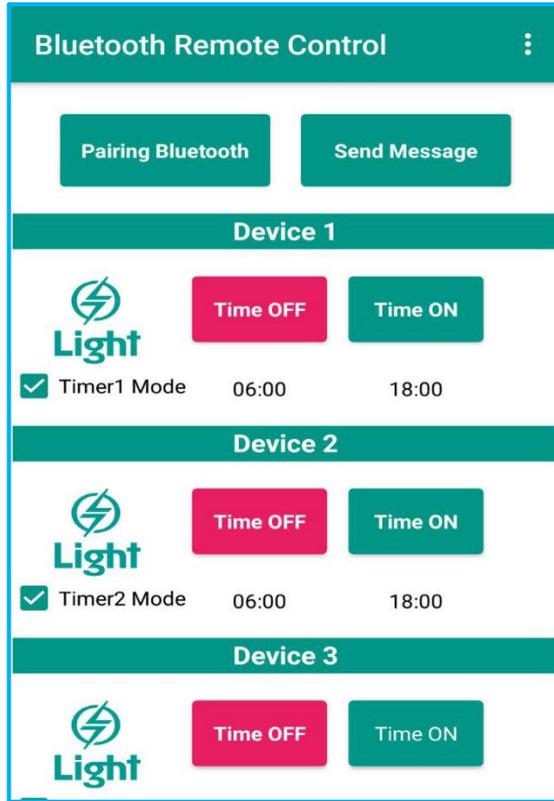
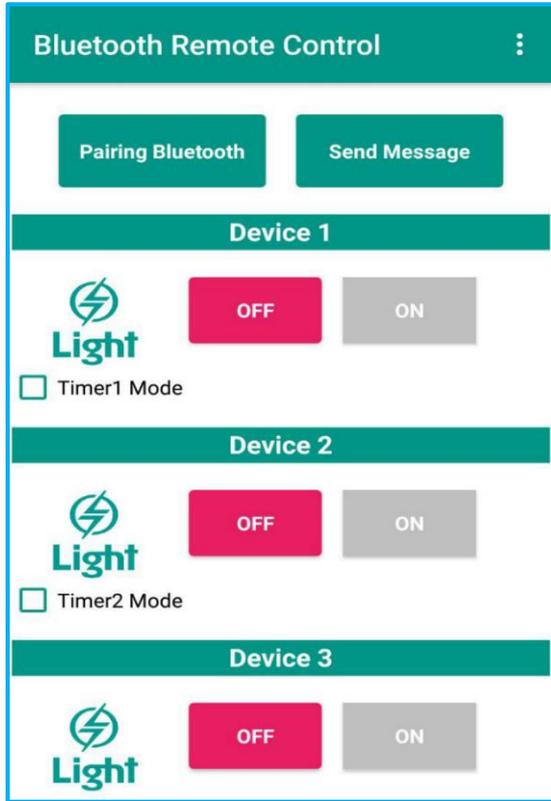
Gate remote



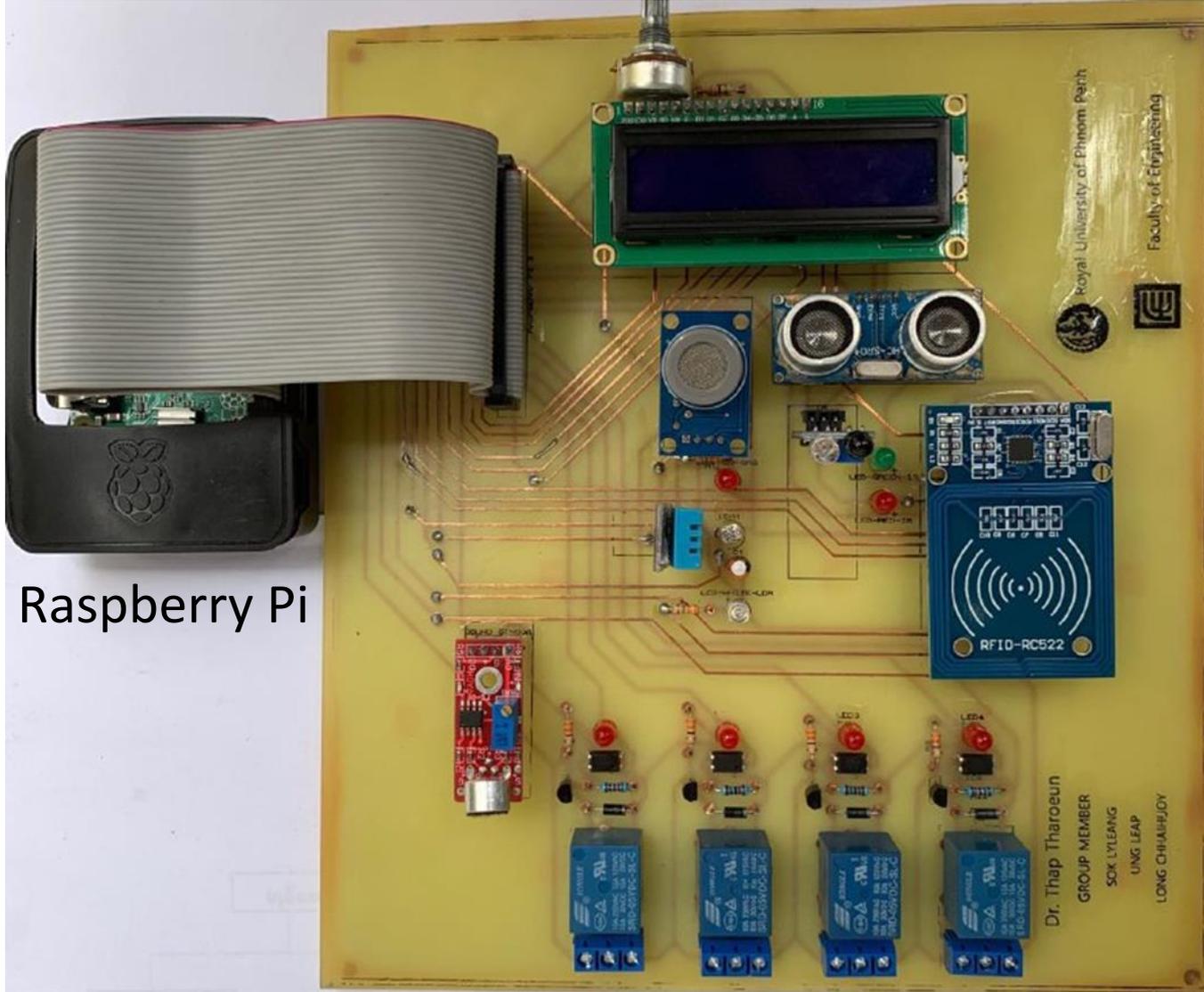
Microcontroller Kit







Raspberry Pi Kit



Raspberry Pi

Research fields

Dept. of Telecom. and Electronic Eng.

- IoT, Automation, and PLC
- Smartphone App Development
- Smart system and Security
- RF Environment Analysis
- Antenna Design and Mobile Communication
- Computer Networking

The Department of Electrical Engineering



2021



