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Education:

S.T. (B.S.) in Electrical Engineering,
Petra Christian University, Indonesia. 2012-2016
Petra 2 Senior High School Surabaya, Indonesia 2009-2012

Research Interest:

Automatic Control Systems, Computer Vision, Robotics

Technical Skills:

C/C++ Programming, Matlab, Siemens PLC Programming, Ladder Diagram Programming

Research Experience:

Project : **Mobile Robot Movement using EEG Sensor Emotiv Epoc**

The main purpose of this project is mobile robot movement using human expressions through EEG sensor, and study of human brain activity while expressing some expression. I used the commercial EEG sensor (Emotiv Epoc) to control mobile robot by capturing expressions which already initialized as a direction command. In order to reach the optimal configuration to control the mobile robot, there are two sets of configuration. These two sets of configuration tested by finding which set is faster to control the mobile robot. Though a certain set of configuration chosen, the testing continues using some threshold value, which function as a validation to the true value of certain expression. These tests come with eight configurations of threshold value and tested based on response time for the mobile robot to reach the goal. The first configuration until seventh configuration are showing response time, which getting faster, then after the eighth configuration tested, the response time was slower than the seventh configuration. In conclusion the seventh configuration was chosen as the optimal configuration to control mobile robot.

AWARDS, ORGANIZATION AND ACTIVITIES

Description	Place	Year
Petra Automotive Challenge 2011	Third Place Winner	2011
Junior Assistant	Laboratory of System and Control	2013
Member of Caring Department	Petra Electrical Student Council	2013/2014
Leader of Electrical Student Council	Petra Electrical Student Council	2014/2015
Member of Faculty Legislative Board	Petra Faculty Legislative Board 2	2015/2016
Vice-Leader of Student Legislative Board	Petra Student Legislative Board	2015/2016
Senior Assistant	Laboratory of System and Control	2014-2016
Most Active Student Achievement	Student Activity Points : 325.9	2016

WORKING EXPERIENCES AND INTERNSHIP PROGRAMS

Description	Place	Year
Electrical Internship	KONE INDO ELEVATOR	2015 (June – July)
Duckietown Summer School Program	National Chiao Tung University	2017 (July)
International Duckietown Summer Program	Petra Christian University	2017 (August – September)

PROJECTS

Name	Course	Year	Things Learned
Library Circulation System	Web Programming	3 rd Semester (2013/2014)	HTML5, PHP
Current Sensor ACS712	Sensor and Actuator	4 th Semester (2013/2014)	Op Amp, ACS712 Sensor, Arduino Programming
Energy Meter Using ACS712 Current Sensor based on Arduino	Sensor and Actuator	4 th Semester (2013/2014)	Op Amp, ACS712 Sensor, Arduino Programming, AC measuring
Quadruple Crawling Robot	Robot Engineering	6 th Semester (2014/2015)	Servos, Arduino Programming
Stamping Machine using TIA Portal (Siemens PLC)	Automation I	6 th Semester (2014/2015)	Siemens PLC Module, Ladder Diagram, TIA Portal

Mobile Robot Movement Using EEG Sensor Emotiv	Thesis	8 th Semester (2015/2016)	EEG Sensor (Emotiv Epoc+), Brain Theory, Arduino Programming, Bluetooth Module, Driver Control
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PERSONAL SKILLS

1. Language :

- **Indonesia** : Native in Writing, Listening, Speaking
- **English** : Fluent in Writing, Listening, Speaking
- **Chinese** : Fair in Writing, Listening, Speaking

2. Computer :

- **PLC Programming** (Siemens)
- **HMI Interface** (Wonderware Invensys)
- **Ms. Office** (Word, Excel, Powerpoint)
- **Programming** :
 - **Assembly** (Basic)
 - **C programming language** (Basic)
 - **Matlab** (Basic)
 - **Arduino** (Intermediate)

Some project references :

Name	Description
Current Sensor ACS712	https://www.youtube.com/watch?v=2wpLzZCguBY
Energy Meter Using ACS712 Current Sensor based on Arduino	https://www.youtube.com/watch?v=vaIc5n-ICCg
Quadruple Robot	https://www.youtube.com/watch?v=pjWizaALZaU
Stamping Machine using TIA Portal (Siemens PLC)	https://www.youtube.com/watch?v=2mhTmydvE_I
Mobile Robot Movement Using EEG Sensor Emotiv	https://youtu.be/eZAQMJgyWOo