

List of DIP Projects in 2014/2015 (Semester 1)

Project ID	Title	Main Supervisor	Thematic Programmes	Lab
E079	Design and development of a cognitive robotic vacuum cleaner	Er Meng Joo	EEEbot The Robotic Challenge Programme	Internet of Things (S1-B4c-14)
E041	Robotic Games	Wang Han	EEEbot The Robotic Challenge Programme	Intelligent Robotics Lab (S2.1-B4-01)
E032	Face Recognition on PCA Project	Wang Han	EEEbot The Robotic Challenge Programme	Intelligent Robotics Lab (S2.1-B4-01)
E062	LIFTY - A ROBOT TO ASSIST AN INDIVIDUAL IN DAILY TASKS	Wang Han	EEEbot The Robotic Challenge Programme	Intelligent Robotics Lab (S2.1-B4-01)
E064	Energy-Efficient Robots for Motion and Task Cooperation	Hu Guoqiang	EEEbot The Robotic Challenge Programme	Intelligent Robotics Lab (S2.1-B4-01)
E066	Design and Development of an Automatic Rain Detection and Clothes Protection System	Er Meng Joo	EEEbot The Robotic Challenge Programme	Internet of Things (S1-B4c-14)
E068	Electroencephalogram (EEG) Based Biometric Security System	Justin Dauwels	Electromedical Technologies Programme	Autonomous Robotics Research Lab (S2-B6a-01)
E089	ECG signal acquisition, processing and classification	Lin Zhiping	Electromedical Technologies Programme	Valen 2 (S1-B4c-10)
E086	Vital Signs Monitoring using a Smart Phone	Ser Wee	Electromedical Technologies Programme	Valen 2 (S1-B4c-10)
E043	Social Neuroscience: Neural recordings during social interactions	Justin Dauwels	Electromedical Technologies Programme	Autonomous Robotics Research Lab (S2-B6a-01)
E007	Eavesdropping technologies for mobile devices	Andy Khong Wai Hoong	Mobile Computing Thematic Programme	workstation resource lab s2-b3b-10
E040	Smartphone App: Smart Coupon & Discount info Distribution	Shum Ping	Mobile Computing Thematic Programme	Communication Laboratory II (s2-B4c-17)
E093	Next Generation Touch Interface	Andy Khong Wai Hoong	Mobile Computing Thematic Programme	workstation resource lab s2-b3b-10
E071	Visual Object Search Engine	Yap Kim Hui	Mobile Computing Thematic Programme	Computing Laboratory (s2-b3b-08)
E059	Micro-doppler Analysis and Classification	Ng Boon Poh	Radar Programme	Infinitus (S2-

				B4b-05)
E061	Prototyping A Synthetic Aperture Radar (SAR) on a Unmanned Aerial Vehicle (UAV)	Ng Boon Poh	Radar Programme	Infinitus (S2-B4b-05)
E034	Jamming and anti-jamming to phased array radar	Teh Kah Chan	Radar Programme	Media Tech Lab (S2.2-B4-02)
E035	Compressed sensing radar	Justin Dauwels	Radar Programme	Media Tech Lab (S2.2-B4-02)
E082	Design and development of a Comeback Cansat	Shao Xuguang	Satellite Programme	SaRC-I (S2.2-B3-06)
E039	Smartphone Satellite	Low Kay Soon	Satellite Programme	SaRC-I (S2.2-B3-06)
E021	Software Define Radio (SDR) Technique in GPS/GNSS Receiver Development	Erry Gunawan	Satellite Programme	SaRC-II (RTP/BX-07)
E005	Develop of Radiation-harden-by-design SPI Data Bus	Chen Shoushun	Satellite Programme	SaRC-II (RTP/BX-07)
E060	Remote control and stabilization of a camera system for near space applications	Low Kay Soon	Satellite Programme	SaRC-I (S2.2-B3-06)
E042	Wireless Speaker System	Zheng Yuanjin	Smart Electronics Programme	VLSI Lab (S2.1-B3-01)
E070	Wireless Sensor Nodes (WSN)	Siek Liter	Smart Electronics Programme	IC Design II (S1-B2b-10)
E008	Converting Large-sized Surfaces into Touch Interface	Andy Khong Wai Hoong	Smart Electronics Programme	Software Engineering Lab(S2.2-B4-04)
E009	Making Sense of Human Feelings for Computers	Andy Khong Wai Hoong	Smart Electronics Programme	Workstation Resource Lab(S2-B3b-10)
E078	Smart Controller with Brainwave Analyzer	Yvonne Lam Ying Hung	Smart Electronics Programme	Project Lab (S2-B4a-02)
E013	Wireless Audio System	Zheng Yuanjin	Smart Electronics Programme	Integrated Systems Research (S1-B2a-04)
E072	"Smart" Home	Arindam Basu	Smart Electronics Programme	C Design I (S1-B2b-13)
E038	Solar energy-powered LED Lighting system: Integration of solar cell panels, rechargeable batteries and LED lighting panels	Chen Tupei	Smart Electronics Programme	Integrated Systems Research (S1-B2a-04)
E047	Virtual Touch Screen with Gesture Sensing using Passive Infrared Sensors	Kim Tae Hyoung	Smart Electronics Programme	Electronics Lab III (S2-B4a-04)
E083	Low power wireless sensor platform	Siek Liter	Smart Electronics Programme	IC Design II (S1-B2b-10)
E033	Modular concentrated photovoltaic charging unit for indoor light/solar harvesting	Wong Kin Shun, Terence	Smart and Micro Grids for Integration of Renewable Energy Sources	Project Lab (S2-B4a-02)
E049	Wireless Charging	Law Choi Look	Smart and Micro Grids for Integration of Renewable Energy	Infinitus (S2-B4b-05)

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E075	Wireless Energy Meter Design and Applications	Chong Han Joo Peter	Smart and Micro Grids for Integration of Renewable Energy Sources	Comms 3 (S2-B3c-26)
E019	Development of household photovoltaic power supply system with grid-connected and standalone operation ability	Wen Changyun	Smart and Micro Grids for Integration of Renewable Energy Sources	Electric Power Research Lab (S2-B7c-01)
E036	Dynamic Visual Performance in Green buildings based on IoT (Internet of Things)	Soong Boon Hee	Smart and Micro Grids for Integration of Renewable Energy Sources	Communication Research Lab (S2.1-B4-03)
E050	The Charge and Discharge Scheme of the Battery in the Solar Lighting System	Wen Changyun	Smart and Micro Grids for Integration of Renewable Energy Sources	Electric Power Research Lab (S2-B7c-01)
E015	Electric Vehicle Tracking System Using Global Positioning System	So Ping Lam	Smart and Micro Grids for Integration of Renewable Energy Sources	Clean Energy Research Lab (S2-B7c-05)
E052	Integration of Electrical Vehicle (EV) to Power Grid using wireless power transfer	Wang Peng	Smart and Micro Grids for Integration of Renewable Energy Sources	Water and Energy Research (S2.1-B3-02)
E092	Energy Efficient or Cost Efficient – Simulation of Future Electrical Markets	Hu Guoqiang	Smart and Micro Grids for Integration of Renewable Energy Sources	Process Instrumentation (S2.2-B4-03)
E081	Simulation of house with Independent energy source	Justin Dauwels	Smart and Micro Grids for Integration of Renewable Energy Sources	Process Instrumentation (S2.2-B4-03)
E053	Smart PV panel for street lighting system	Wang Peng	Smart and Micro Grids for Integration of Renewable Energy Sources	Water and Energy Research (S2.1-B3-02)
E094	Bicycle Phone Charger	Tan Chuan Seng	Smart and Micro Grids for Integration of Renewable Energy Sources	Computational nanoelectronic (S1-B2a-08)
E069	Harvesting Energy from Human Body	Justin Dauwels	Smart and Micro Grids for Integration of Renewable Energy Sources	Autonomous Robotics Research Lab (S2-B6a-01)
E073	The Intelligent Solar energy system	Tse Man Siu	Smart and Micro Grids for Integration of Renewable Energy Sources	Nanoelectronic Design (S2-B5a-01)
E054	Real time load simulator for load aggregation in building management system	Wang Peng	Smart and Micro Grids for Integration of Renewable Energy Sources	Water and Energy Research (S2.1-B3-02)

E065	Demand Response Management for Singapore Distribution Grid	Gooi Hoay Beng	Smart and Micro Grids for Integration of Renewable Energy Sources	Clean Energy Research Lab (S2-B7c-05)
E023	Positioning and Communication	Law Choi Look	UAVIONICS	Control Systems Lab – S2.1-B4-02
E030	Project G	Ong Keng Sian, Vincent	UAVIONICS	Control Systems Lab – S2.1-B4-02
E031	Development of an autonomous unmanned aerial vehicle	Xie Lihua	UAVIONICS	Control Systems Lab – S2.1-B4-02
E084	Intelligent control of a UAV	Er Meng Joo	UAVIONICS	Control Systems Lab – S2.1-B4-02
E044	Project H	Lim Meng Hiot	UAVIONICS	Control Systems Lab – S2.1-B4-02
E024	Project A	Huang Guangbin	UAVIONICS	Control Systems Lab – S2.1-B4-02
E025	Project B	Chua Hock Chuan	UAVIONICS	Control Systems Lab – S2.1-B4-02
E026	Project C	Cheng Tee Hiang	UAVIONICS	Control Systems Lab – S2.1-B4-02
E027	Project D	Ling Keck Voon	UAVIONICS	Control Systems Lab – S2.1-B4-02
E029	Project F	Goh Wang Ling	UAVIONICS	Control Systems Lab – S2.1-B4-02
E085	Design and development of optical wireless systems for secure communication	Chow Kin Kee	Undergraduate Photonics Programme	Photonics 1 Lab (S1-B3a-08)
E045	Making 3D "images"	Tang Xiaohong	Undergraduate Photonics Programme	Photonics 1 Lab (S1-B3a-08)
E020	DESIGN AND DEVELOPMENT OF 3D PRINTER FOR SPECIAL MATERIALS	Shum Ping	Undergraduate Photonics Programme	Communication Lab III (S2-B3c-26)