ABDUL RAHMAN

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arshanapps.com

EDUCATION

08.2015 – Present	Bachelor of Engineering (Computer Engineering) – Honours NUS University, Singapore ETH University, Switzerland – Semester exchange programme Scholar of Temasek Education Foundation GPA - 4.29/5 (Honours – Distinction)
04.2010 – 05.2013	Diploma in Information Technology with Merit Diploma Plus – Minor in Psychology Fundamental Temasek Polytechnic, Singapore GPA – 3.92/4 (9 Distinctions and 14 A's) Director's List for AY 10/11 & AY 11/12

RESEARCH EXPERIENCES

08.2017 - Present	Application of Reinforcement Learning in Weather Routing - Dissertation - Optimize velocity of a vessel to reduce fuel consumption rate while meeting port schedules under harsh weather conditions using calculus of variation and Q-learning

PROJECT EXPERIENCES

Data Science
- Built Time series data classifcation for IoT sensors using RNN LSTM algorithm in keras deep learning framework to classify 10 dance moves with 98% accuracy
- Built CNN and RNN Image classification algorithms using python sci-kit learn and TensorFlow environments to recognize Italian hand signs with 80% accuracy

Mobile App Development
- Designed and Developed an Android application with media playback and push notification service using Firebase in Java. The app has gartnered more than 300,000 downloads
- Leads a team and developed an iOS Financial planner application with Google drive integration in Objective-C

Software Development
- Leads a team, conceptualized and developed a Java Desktop Todo list application that can be all managed by keyboard shotcuts for advanced users

Embedded System Development
- Proficient with Computer architecture such as Superscalar, VLIW, Multi-core processors and hardware accelerators.
- Developed an ARM based embedded system that measures light, temperature and accelerometer readings in C language in LPC1769 microcontroller

WORK EXPERIENCES

01.2018 – Present   Teaching Assistant – National University of Singapore, Singapore
- Assist Professors in teaching undergraduate computer engineering students in their capstone design project course where they have to built an wearable device that tracks and predicts dance moves using machine learning and IoT sensors

04.2013 – 05.2013   Technical Support Officer – Temasek Polytechnic, Singapore
- Assisted Lecturers in teaching freshmen students programming methodology and data structures
- Modified and updated the student fitness web application in PHP

08.2012 – 12.2012   Project Manager Intern – Blue Glue (Youkilele) Ltd, Indonesia
- Leads a team in conceptualizing and building an Employee Task Management web application
- Revamped Database system with new relational database for Manufacturing and Inventory departments

PROGRAMMING SKILLS   (In order of decreasing familiarity)
Java, Python, Keras, Tensorflow, scikit-learn, Android development, C, Assembly language, Verilog, SQL, C#, Caffe, Objective-C

SOFTWARE SKILLS   Eclipse, Android Studio, Visual Studio, Github, LCPExpresso, Jupyter Notebook, Xcode, Vivado, MS-Office

LEADERSHIP

12.2012 – 12.2012   Delegate – Youth Model ASEAN Conference
- Discussed socio-political, environmental and economic issues prevailing in ASEAN region with the Singapore Minister of Culture, Community and Youth

07.2011 – 06.2012   President – IT Special Interest Group
- Liaised with Course Manager and Year Coordinators regarding the welfare of the students
- Organized events, workshops and exchange programmes for students of Diploma in IT

CONSCRIPTION

06.2013 – 06.2015   Emergency Ambulance Medic – Singapore Civil Defence Force
- Responded to emergency calls and provided pre-hospital care services, life support and first-aid treatment to critically ill and injured patients

LANGUAGES   Tamil: Mother Tongue
English: Proficient (level C2 on European Language Scale)
Japanese: Basic knowledge (level A1)

HOBBIES   Hiking, Cycling, Current affairs, Tech enthusiast

REFERENCES   Available upon request