IDAWATI BUSTAN

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EDUCATION

Stanford University, USA

NUS Overseas College Program, October 2016 – December 2017

Computer Science (Machine Learning)

National University of Singapore

B.Eng. in Computer Engineering (Honors), expected Spring 2018
Minor in Technopreneurship

PROFILE SUMMARY

- Aspiring computer engineer with deep passion in robotics, autonomous systems and digital healthcare.
- Constant learner with broad interest in tech industry, business and technopreneurship.

WORK EXPERIENCE

Fellow Robots, San Jose, CA

Software Engineer, August 2016 – July 2017

- Code and design robot-related and infrastructure related functions in software.
- Test the prototypes and ensure the written code is working comprehensively.
- Work together with the team across multiple engineering & non-engineering disciplines, to having the robot(s) functioning properly and cohesively overall.

BizEquity Inc., Singapore

Sales and Business Development, February 2016 – June 2016

- Pitched business valuation software to prospective clients: financial advisors and accountants.
- Working on company's strategies and efforts in maintaining and expanding company's client base.

MSD (Merck Sharp & Dohme), Singapore

Digital Health Consultant, May 2016 – June 2016

- Provide ideas on how information technology should influence and transform global healthcare to create value for the world.
- Define boundaries for new products and services, and to look at challenges and opportunities with financial acumen.

Bumblebee Autonomous Underwater Vehicle, Singapore

Software Team, July 2015 – July 2016

- Work closely with a multi-national team of 13 Undergraduates from Mechanical, Electrical, Computer Engineering and Computer Science Major in developing a low-cost autonomous underwater vehicle, which represented NUS in the Singapore Autonomous Underwater Vehicle Challenge 2016.
- Develop the vehicle's PD control system and mission planning algorithms on Robotic Operating System (ROS).
- Interface embedded sensors, actuators and other serial devices (IMU, depth sensor, thrusters) onto RaspberryPi2 and integrate software packages built by the team members into the overall system.

A*STAR Bioprocessing Technology Institute, Singapore

Research Attachment, November 2016 – July 2017

- Shadowed and learned from research officers in laboratory research experiments on gene expression despite having much prior knowledge in the field.
- Performed research on recombinant protein expression in Chinese Hamster Ovary (CHO) cells.

TECHNICAL QUALIFICATIONS

- *Programming Languages*: C/C++/C#, Python, Java, ROS, CSS, HTML, ARM Assembly, VHDL
- *Operating Systems*: Windows, Linux/CLI, UNIX/BSD
- *Computer Science Courses*: Machine Learning, Data Structures and Algorithms, Real Time Operating System, Programming for Computer Interfaces, Software Engineering, Digital Fundamentals, Signals and Systems, Semiconductor Physics and Devices
- *Other Courses*: Technopreneurship, Managerial Economics, Operations Management, Financial Accounting

AWARDS AND HONORS

Awards:

- **Changi Airport of the Future Hackathon**, 1st Place: Developed a web-app prototype to create seamless experience for visitors of Changi Airport, 2016 (USD$3,000).
- **Singapore Grand Challenge**, 1st Place: Propose idea on digital healthcare to promote medical adherence and monitoring on elderly, 2016 (SG$20,000).
- **Data Science Student Challenge**, 5th Place: Built predictive software for price of flats in Singapore, 2016.
- **Singapore Junior Physics Olympiad, Silver Award**, Institute of Physics Singapore, 2011.
- **A*STAR Young Researchers Attachment Program**, 2010.
- **National Science Olympiad Indonesia**, Bronze Medal in Physics, 2008. (RP 2,000,000)

Scholarship:

- **NUS Overseas College Scholarship Program**, Silicon Valley (one-year internship), 2016.
- **ASEAN Scholarship**, The Association of Nanyang University Graduates, Singapore, 2010.

TECHNICAL PROJECTS

Autonomous System

- **Bumblebee Autonomous Underwater Vehicle**, Vehicle's Control Panel & User Interface, Vehicle Feedback Control System & Navigation, Testing & Debugging, 2016.
- **Hornet Autonomous Underwater Vehicle**, Sensors Interfacing, Thruster Control, Vehicle (Proportional Derivative) Feedback Control System, 2016.
- **Line-tracking Autonomous Vehicle**, Sensor and Actuator Interfacing, Arduino Programming, 2015.

Embedded Design Programming

- **I-WATCH**, Sensors Interfacing, Assembly Programming and UART Communication, 2016.

Software Engineering/ Development

- **ChangiX: Everybody on iChangi,** Software Back-end, Product Design, 2016.
- **Prosper: Property Price Forecaster**, Software User Interface Design and Implementation, 2016.
- **PLANIT: Personal Task Manager**, Software Design and Architecture & Storage System, 2015.

COMMUNITY LEADERSHIP EXPERIENCE

NUS Indonesian Students' Association, Singapore

- **Executive Committee**, Sports Division, 2015 - 2016
- **Project Director**, Charity Sports Day, 2015
- **Sets Designer**, NUANSA Student's Cultural Production: Flowers of Asmat, 2015

NUS The Engineering Club, Singapore

- **Public Relation Committee**, Designer, 2016
- **Publicity Director,** The Engineering Bash: Bashathon, 2016
- **Business Development Committee**, Business Venture, 2015

NUS Eusoff Hall, Singapore

- **Marketing Director**, Eusoff Hall Students' Awareness Committee, 2015 – 2016
- **Publicity Vice Head**, Eusoff Hall Dance Production, 2015
- **Sets & Property Member**, Eusoff Hall Dance Production, 2015

TEACHING EXPERIENCE

- Teacher, Math Vision Enrichment Centre, Singapore
- Physics Club, SMPK 7 Penabur, Jakarta