# Muhamad Andung Muntaha

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Stockholm, Sweden May 15, 2019

A T-profile software engineer with a demonstrated history in delivering professional projects using various technology. I am passionate in writing software to build and integrate complex systems. My skills vary from working with low-level stuff up to building distributed systems. I adapt quickly and strive to contribute more to the organization.

#### Work Experience

### Scania Sverige

Stockholm, Sweden

Thesis Worker in Real-Time Systems

January 2019 - June 2019

- Reduced HIL real-time simulator troubleshooting time by developing logging & monitoring system.
- Improved the system development process by introducing a formal schedulability analysis method based on time demand analysis to validate system's timing requirement.

Freelance Stockholm, Sweden

Embedded Linux Developer

August 2018 - December 2018

- Delivered 2 cellular network automatic testing devices to the client which were developed using Qt.

Ontel AB

Stockholm, Sweden

• Embedded Software Developer

March 2018 - December 2019

 Delivered 2 types of bike sharing IoT hardware prototypes by designing and implementing the software in Arm MbedOS while maintaining the system's low-power requirement and addressing an unreliable network constraint.

#### KTH MIST Student Satellite Project

Stockholm, Sweden

Embedded Software Developer

March 2018 - December 2018

- Achieved a significant milestone in the end-to-end satellite communication by implementing a MISRA-C compliance radio communication API.
- Minimized the functional testing time by introducing a radio link communication simulator.
- Introduced a proof-of-concept in processing experiment data by extending the ground station software.

### Schlumberger

Jakarta, Indonesia

IT Engineer & Application Developer

November 2013 - June 2017

- Saved \$5.5M soft cost savings by introducing 15 Sharepoint applications, 2 web applications, and 2 mobile
  applications which transformed internal business processes to reduce non-productive time, preventing risks, and
  increasing revenue.
- Nominated as the winner of transformation award by developing a web and mobile application to increase Account Receivable turnover ratio.
- Awarded as the best IT engineer based on user satisfaction feedbacks as well as excellent performance in maintaining IT services availability.

#### **Education**

## KTH Royal Institute of Technology

Stockholm, Sweden

M.Sc. Embedded Systems, minor in Embedded Software

August 2017 - June 2019

- Related courses: Embedded Systems, Embedded Software, Software Reliability, Compiler and Execution Environment, Networked Systems Security, and Modern Method in Software Engineering.
- Thesis: Non-intrusive Logging and Monitoring System of A Parameterized Hardware-in-the-loop Real-Time Simulator.

### 10 Nopember Institute of Technology

Surabaya, Indonesia

B.Eng. Electrical Engineering, minor in Computer Engineering

 $August\ 2009\ \text{-}\ July\ 2013$ 

- Related courses: Embedded Systems, Computer Architecture, Data Communication, Computer Networks,
   Computer Vision, Algorithm & Data Structure, and Artificial Intelligence.
- Thesis: Self-localization of Humanoid Robot Inside Soccer Field Using Triangulation and Particle Filter Methods.

### Skills

- Programming Language: C, C++, C#, Java, Python, JavaScript, Bash
- Real-Time OS: Arm MbedOS, MicroC/OS-II, FreeRTOS, RT-Linux
- Cross Platform: Qt, Xamarin
- Web Technology: .Net Core MVC, SignalR, Vue.js
- Database: MongoDB, SQLServer
- Other: Build systems, CI/CD pipelines, Docker, Git, Doxygen