

# Muhamad Andung Muntaha

muam@kth.se

+46764091032, +6281380260278

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 the 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
  - Booked \$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, prevent risks, and increase revenue.
  - Nominated as the winner of the 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 - 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