THOMAS MØLLER JENSEN

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EDUCATION

Aalborg University, Denmark *Sep 2020 - now*
Student in Computer Engineering, bachelor

Courses:
Imperative programming
PBL
Linear Algebra
Computer Networks
Calculus
Structured System Development
Algorithms
Engineering Mathematics for Computer Engineers
Operating systems, Languages and Compilers

Unevaluated Courses:
Security
Design of Embedded Systems
High Performance Programming

TECHNICAL SKILLS

Programming:	Java, Python, C and C++.
Software & Tools:	**Development:** Eclipse, VSCode and other IDE, shell and git.
	Debugging: Filezilla, Wireshark, NMap and GQRX.
	Various development boards: Arduino Uno, Mega, esp..., Raspberry Pi.
	Others: Linux, LaTeX, Desktop computer hardware (I've built multiple PC's).

PROJECTS

Most projects are available in the AAU project library.

AAU Robocup
- The project was done over a period of 1 month where we had to make a LEGO Mindstorms robot which could follow a line on a course and do some simple tasks
- I learned how to use C to program something else than an Arduino which i had prior experience with from the courses we had during high school.
- I participated in this project twice, the second time learning Python.

Saving Mankind
- It was a very simple project, we had to make a measurement station which could sample a lot of different data from a variety of sensors, these included a temperature sensor, CO sensor, Co2 sensor and a generic particle sensor
- I learned the importance of following the curriculum is for the learning process of the project, since the project did make a good prototype but the final design solution weighed too much on the design of a 3D print

Wireless Update
- This is a very interesting project, where we were given a breadboard with a Picom LoPy, which was made to measure fullness of garbage containers in Brazil, our project was about being able to wirelessly transfer an update to the system. To do this we had to research the LoRaWAN network and the hosted website where it operated over, we also learned about HTTP requests a semester before computer networks, discrete mathematics (a small bit of it) with XOR operations and how to implement linear algebra operations.

Adaptive Cruise Control Update
- This project was about implementing a simulation of a highway, to be able to test whether ACC would make sense to be implemented in all future cars.
- This project taught me the ability to take a project into my own hands, this was probably my most frustrating project since i basically had to implement most of the project in the end.
- This implementation was done in python.

AAUSAT-6 Full-Duplex Implementation
- During this project it was important for us to quickly finish the implemenation to get the implementing group member back to theory, as the project implementation in itself was not particularly relevant to the curriculum. The result was a python class that could turn two transceivers controlled by an API controlling one transceiver into an object handling both downlink and uplink in two threads.

Discord bot development(solo)
- I've been actively developing(undocumented sadly) two Bot applications for the VOIP service Discord, one entirely written in Java and one Java with a bit of Python:
- Mør Bot is my personal bot for my Discord server, which i implemented the Dv8tion JDA API and Sedmelluq Lavaplayer API in, some key features include: a command interface, YouTube audio playback, server permission handling and a few others
- The Nut Bot was an unpaid request from a group of people I actively play video games outside of studying with, the requested features were a log of deleted messages in the server, a log of changed messages, a group manager(basically who wants to play video games together), and audio playback. This project is a fork of Mør Bot, hence i count it as the same project.

WORK EXPERIENCE

Cash register worker, Coop *Sep 2016 - Feb 2017*
Youth worker
- I've worked at the cash register at a Coop store, where i had the responsibility of the cash in the cash register I was working at.

LAN-comitee during High School *Aug 2016 - June 2019*
Replacement Representative - unpaid work
- While going to high school i participated in most LAN-parties on the high school while being an active member of the comitee, where we descided competitions and planned those together, i together with a classmate held the position of unofficial replacement representative and as such was entrusted with leading the events in the absense of the official representative.