

# Lars Kallryd

## Wisdom is to the mind what health is to the body.

#### Education

2007--2010 Technical gymnasium education, Volvo gymnasium, .

2011–2014 B.Sc., Mechanical Engineering, Chalmers, .

2014–2015 M.Sc., Naval Architecture and Ocean Engineering, Instituto Superior Técnico, .

2015–2016 M.Sc., Naval Architecture and Ocean Engineering, Chalmers, .

#### Master thesis

Title Hybrid propulsion system simulation and control

Supervisors PhD Francesco Baldi, Andrea Coraddu

description To simulate and optimise the design and control of the hybrid propulsion system

(including diesel-electric propulsion and batteries) for tugs.

#### Bachelor thesis

Title Självspelande labyrintspel, Autonomous maze game

Supervisors Prof. Bo Egardt

description The development of an automated marble maze. A ball is guided through the maze

with optical feedback from a camera.

## Internships

Volvo Trucks Technical team, Gent, Belgium

Duration For 1 month in the autumn of 2009

description Received calls from retailers of Volvo trucks in the Nordic region and English speaking

countries. I translated information about the problem to English for the technicians

at the office

Volvo Trucks Modellverkstaden, Skövde

Duration 7 weeks, spring of 2010

description Worked with maintaining the mold models for the 13/16 litre engine. Controlling

advanced NC mills, machining molds and machine special orders from companies

outside of Volvo Trucks.

#### Experience

2010–2011 Assembly line, Volvo Cars, Skövde.

The external assembly of the DW10c engine

2011–2016 **Machine operator**, *Volvo Cars*, Skövde.

Work during summer/winter vacations as machine operator of cylinder heads for the i5d

2016-2017 **Test cell operator**, *Volvo Cars*, Gothenburg.

Operator of a test cell for petrol engine functional testing

2017-present Calibration engineer, Volvo Cars, Gothenburg.

Calibrator of torque model for petrol engines

#### Detailed achievements:

- o Achievement 1: 2018 Torque model GEP3 Volvos 1.5l 3 cylinder petrol engine
  - Torque model verification high temperature and altitude
  - Certification and test support
- o Achievement 2: 2019- 2020 Torque model VEA Generation 3 MP/HP (197hp/300hp) 2I 4 cylinder
  - Complete data collection in test cells, modelling and analyse
  - Calibration of VVT set points for optimal fuel consumption
  - Optimal ignition set points (MBT base map and compensations)
  - Various ambient condition compensations:
  - Cold climate work Kiruna/Jokkmokk
  - High temperature Phoenix, AZ and Upington South Africa
  - High altitude Breckenridge CO and Pontresina Switzerland
  - Engine power certification and drivability work i.e gearshifts torque reductions etc
- o Achievement 3: 2020 present: Torque model VEA Generation 3 LP (197hp) 2l 4 cylinder engine.

## Languages

Swedish C2 Native language

English C2

Spanish A2 Studied during high school

Portuguese A1 Studied during exchange

French A1 Taken night classes in french at Folkhögskolan

## Computer skills

OS Microsoft Windows, Mac OS, Linux

Calibration ComTest, Orion, AVL Indicom and Concerto, Etas INCA and MDA

software

Office Microsoft Office package, LaTeX

software

Coding MATLAB, Simulink, Python

CAD software Catia V5, Autodesk Alias, Rhinoceros 3D

Regards

Lars Kallryd

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