# Niels Hokke

Embedded Svstems Master Student

Pushing the boundaries of technology by building innovative prototypes





linkedin.com/in/niels-hokke



Github.com/NielsHokke

## **WORK EXPERIENCE**

## Embedded Engineer 08/2017 - 11/2018

Cleaning Consultancy Delft BV, Delft

Individually developed and validated an on ARM based Bluetooth prototype for high precision industrial color measurements

### **Electrical Engineer**

03/2015 - 04/2017

Kinergizer BV, YES-Delft, Delft

Redesigned and optimized a power management for an energy harvesting application and designed a logging device that captures the output of the energy harvester in multiple scenarios

#### **Intern** 03/2015 - 04/2017

Sogeti Nederland, Amersfoort

Contributed to an ARM & FPGA based smart meter test-bench by writing communication software in C++ for the P0 port

#### Intern 11/2014 - 01/2015

Rexnord FlatTop, 's-Gravenzande

Industry 4.0 project were three silos full of granulate were connected to the internet to visualize the contents company wide

#### **Intern** 03/2015 - 04/2017

Kinergizer BV, YES-Delft, Delft

Designed a power management for an energy harvesting application in order to provide stable voltage outputs and proper charging regimes for the optional energy storage

#### **EDUCATION**

# **Embedded Systems (MSc)** 09/2016 - 07/2020 Technical University Delft

Including premaster. Thesis topic in Event Driven Energy Harvesting Medium Access Control. Extra courses in: Security and Cryptography, Sustainable Innovation in Practice, and Network Security

# Electrical Engineering (BSc) 09/2012-06/2016 The Hague University of Applied

Sciences, Delft

Minor in robots and vision, extended project work in combination with a veterinarian to develop a smart litter box, attended various hackathons

## HAVO, NT & NG, Bilingual 09/2007-06/2012 Wolfert van Borselen, Rotterdam

Internationally oriented high school with a focus on social involvement. As end project built an Arduino based color sorting robot

#### **SKILLS**

in



### **AWARDS & CERTIFICATES**

#### Winner of Airbus Fly Your Ideas @ 06/2019

Beating 269 other student teams from around the world, together with three team members from TU-Delft, designed an energy harvesting based IOT solution for the aerospace domain

#### Blockchain Technology Certificate 10/2018

Successfully completed the following advanced computer science master courses: Security and Cryptography, Distributed Algorithms, and Blockchain Engineering

#### Socrates Honours Society 🔗

06/2012

Finished secondary education with a final grade higher than a 7.5

## **VOLUNTEER EXPERIENCE**

## DORPeling 🔗

06/2016 and 06/2018

01/2010 - 12/2011

DORP, Welcome to the village

Extended the functionality of a large art installation by programming a visual to audio translation

For ten days worked in an interdisciplinary team to solve the food scarcity problem by marketing insect fries

#### Trainer

Rugby club the Hookers

Trained 4/5 year old children in the game of rugby

## **PERSONAL PROJECTS**

#### Smart front door

Allowing remote access, access through NFC-tag, and live feed of front door traffic

#### Student house app

Controlling all home-made smart appliances in the house

#### BEN widget 🔗

Android widget showing mobile usage data on the home screen

#### Smart mirror

Integrated screen showing agenda and daily updates