# Niels Hokke
## CEO/Co-founder of Zero Energy Development B.V.

Pushing the boundaries of technology by building innovative prototypes

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## WORK EXPERIENCE

### CEO/Co-founder                                  09/2020 – Current
Zero Energy Development BV, Delft
Co-founded a high-tech startup which pushes the limits of ultra-low-power technologies building batteryless and wireless sensing devices to help enterprises realize the potential of the next generation of IoT

### 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 Based 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

Creative problem solving   Embedded software   Git

C++   Interdisciplinary teamwork   PCB/Circuit design

Wireless   IoT   Energy harvesting   Blockchain

ARM & AVR   Python   Communication   Crypto

## 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 at TU-Delft

### Socrates Honours Society 🔗                    06/2012
Finished secondary education with a final grade higher than a 7.5

## VOLUNTEER EXPERIENCE

### DORPeling 🔗                                   06/2016 & 06/2018
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                                        01/2010 - 12/2011
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