ir. Frank Boerman

Personal data

NAME: Frank Boerman
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Interests

I have a passion for making technological advances applicable and accessible to the greater public. It is important for me that my work helps build a better world for all of us. My drive is to translate the knowledge of engineering into applicable solutions for societal challenges. This desire was the driver for the work I perform at my own company Kolibri Solutions. There I have used my programming knowledge to support the university of Eindhoven in automating their administrative processes. This drive also played a role in my graduation final project, where I partly focused on improving the research tools to make them more user friendly and accessible for scientists from other fields. I aim now to apply this drive to the more challenging societal problems such as climate change and the energy transition. I am especially interested in the energy infrastructure, such as energy transport and the electricity market

SKILLS

With my volunteering work, my university and company work as well as my own hobby projects, I have a broad experience in programming languages and tools. For example: python, C, C++ and golang. Furthermore, I worked on designing and implementing simulations, embedded platforms such as FGPA's and linux devops. I also have some experience with gathering and processing large volumes of public data, recently running my own data dashboard at data.boerman.dev. My favorite language (and most well versed) is python. Both my own company as well as my graduation project as well as the vast majority of personal projects is written in it.

Through my volunteering work I have experience in working with others, managing organizations and learned to negotiate and find solutions considering opposite options.

I speak and write fluently dutch and english and can read and listen to basic german.

Personality

How other people describe me: self assertive, go-getter, ambitious, meticulous, open and friendly. I love doing hikes in nature, preferable in mountainous areas, but also like to go on culture city trips. In my student time I have danced at student dance association esdv Footloose, mainly salsa and bachata. I have also been active there on the organization side of things.

EDUCATION

2017 - 2020 | MASTER ELECTRICAL ENGINEERING

Eindhoven University of Technology, Eindhoven

Specialization: Embedded Systems

SEP 2012 - BACHELOR ELECTRICAL ENGINEERING

2017 Eindhoven University of Technology, Eindhoven

SEP 2005 - | HIGHSCHOOL: VWO, NT EN TECHNASIUM

Jul 2012 KnippenbergCollege, Eindhoven

WORK EXPERIENCE

Aug 2020 - | Junior Engineer LPN TenneT

Now Traineeship bij Large Projects Nederland (LPN), focus at the disciplines

of secundary and telecom engineering

Aug 2017 - | Founder and owner of Kolibri Solutions

Now Founded in August 2017, Kolibri Solutions is a software development company that specializes in digital administration and python program-

ming. It is a spinoff of the ELE faculty of the TU/e for creation and maintenance of the BEP Marketplace and Master Marketplace. For more

information: https://kolibrisolutions.nl/

May 2019 - Graduation project: Coherent De-Dispersion of Radio Pulsar Signals

using Dataflow on FPGA

JUNE 2020 In this project I developed an application for the new dataflow plat-

form StaccatoLab. This platform enables mapping data driven dataflow graphs to FPGA's in a user friendly way for fast performance. The application focuses on processing large ammounts of data in a parallel fashion: parsing astronomy telescope data to search for pulsar stars.

More information can be found on my blog https://boerman.dev/

Nov 2018 - Internship pilot functional safety PMP

Feb 2019 | Created a proof of concept for a pilot of functional safety in a motor

control embedded platform (PMP)

Jul 2018 - | Embedded Software Designer at Prodrive Technologies

Nov 2018 | Worked on the Prodrive Motion Platform (PMP)

Aug 2016 - | Programmer Team Marketplace ELE

Aug 2017

Founded by me with support from the faculty to help with the administration of the influx of new students. Developed and maintained the BEP and Master Marketplace systems. Since August 2017 the company Kolibri Solutions is founded from this.

2015 - IOT Programmer ECO group

2017

After successfully completing my Bachelor End Project at the ECO group of the ELE faculty at $\mathrm{TU/e}$ I stayed on as student assistant to help develop an IOT platform. This included creating management platforms, server administration and programming frontend interfaces.

JAN 2015 - | Interface & Backend Programmer EIT-ICT-RICH

DEC 2015

The EIT-ICT-RICH project was a collaboration between the TU/e, NXP, Swedish Institute of Computer Science and the university of Twente on the area of IOT. I was involved in programming a scheduler for wireless transmissions in an IOT network and creating a visualization for network operators. This visualization showed how the network behaved and gave insights on how to optimize it. My bachelor end thesis was based on parts of this work

2015 - Student Assistent TU/e ELE

Tutor with Computation I en II focusing on computer architecture and C programming

2015 - Interface Programmer at Avular

2016 Avular is een startup company that specializes in building drones. I

Volunteer work and other activities

2016 -	ICT committee esdv Footloose
2020	Responsible for the website as well as administrative systems such as for
	dance exams and the entire server infrastructure
2017 -	Facility committee esdv Footloose
2020	Responsible for maintaining light and other facilities in the dance hall
2017 -	Archive committee esdv Footloose
2020	Founded by me, responsible for gathering and archiving all relevant data
	of the association
2019	Scala Coordinator Introduction 2019
	Representative of the culture umbrella association Scala during the ne-
	gotiations about the Introduction 2019 as well as internal coordinator
	between all member associations
2015 -	Board Secretary IEEE Student Branch Eindhoven
2017	As secretary I was responsible for all communications within the associ-
	ation as well as organizing activities
2015 -	Treasurer Spolu committee Thor
2016	With three fellow committee members we organized a study trip to the
	Czech Republic