Bram van Berlo

Creative, embedded and entrepreneurial technologist

Manifesto

I believe…

Fitness makes you sharper and stronger.

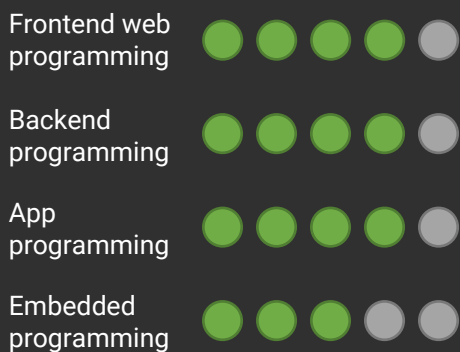Team effort is superior over going solo.

My greatest enemy is stagnation.

Meaningful interactions are created by open dialog.

The greatest potential in life can be approximated by daily continuous small improvements.

A cutting edge technological background combined with an entrepreneurial mindset creates meaningful new digital systems for society.

Skills

Based on 10.000 hours per skill…

Skill	Level
Frontend web programming	●●●●○
Backend programming	●●●●○
App programming	●●●●○
Embedded programming	●●●○○

Education

M.Sc EIT Digital - Embedded Systems Eindhoven University of Technology Dual degree: TU/e exit university. Average mark: 8 (Dutch grading system).	2018 - 2019
M.Sc EIT Digital - Embedded Systems KTH Royal Institute of Technology Dual degree: KTH entry university. Average mark: B (ECTS).	2017 - 2018
Pre-Master Embedded Systems University of Twente Preparation for M.Sc Embedded Systems Average mark: 7.5 (Dutch grading system).	09/2016 – 02/2017
B.Sc Creative Technology University of Twente Average mark: 7.5 (Dutch grading system).	2014 - 2017
Bilingual Atheneum (VWO) Stedelijk College Eindhoven TVWO: economics & society profile. Average mark: 6 (Dutch grading system).	2008 - 2014

Work history

Ph.D. Candidate Eindhoven University of Technology – IRIS Research topic: quantifying the effect of stimuli in mammals with millimeter wave radar.	2020 - now
Treasurer educaCie committee S.A. Proto Keeping track of educaCie committee's **finances.**	2015 - 2017
Concept Developer U-Approach Implementing **gamification** in existing business templates for schools, businesses and innovation plans, executing **market research** in leisure economy website innovation.	2013 - 2017
Acquisiton member pLAN committee S.A. Proto Making new connections and alliances for future LAN parties.	2015 - 2016

Hobbies

Traveling.

Cooking.

Contact

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Student assistant - Creative Technology   2015 - 2016
University of Twente

Support first year Creative Technology students. I have helped with the following courses: "Engineering our digital future" and "Physical Systems and Dynamical Behavior".

Futurologist   2012
U-Approach

Internship: support new ideas, concepts and trends for the future.

DKW Merchandiser   2011 - 2013
Jumbo Supermarkten BV

Restock shelves and **assist** customers where needed at Eindhoven at the Belgiëplein affiliate.

Projects

Project Auralux   2015

Android application development of **implicit street light** alteration system.

Project SMART   2018

Realization of a new startup company together with a few friends to provides smart **real-time market analysis** for advertisement systems in the **OOH advertisement market**.

Publications

A participatory sensing system for road quality data acquisition   B.Sc thesis 2017

Integration of **sensor systems** in participatory sensing **network** for **IRI** number visualization.

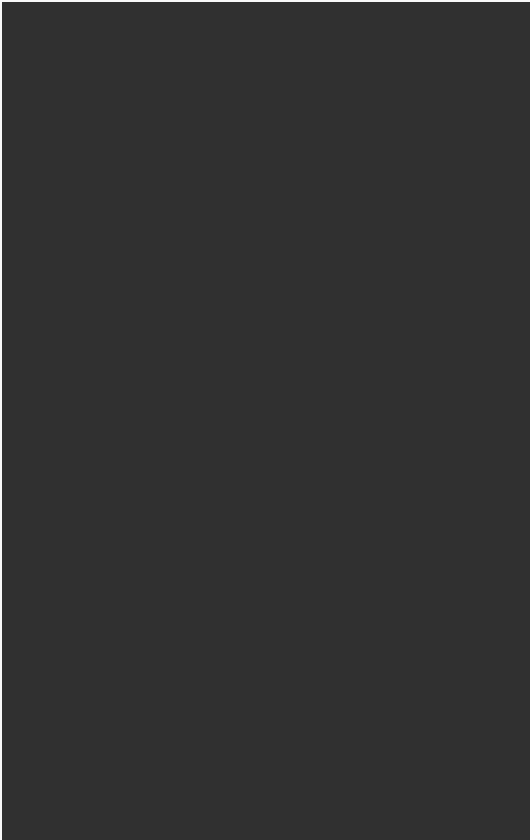`https://essay.utwente.nl/72966/`

Unsupervised feature learning in a federated setting for human activity detection   M.Sc thesis 2019

Introduction of a **software architecture** that combines **federated** and unsupervised feature **learning** to **pre-train deep neural networks**. The networks help learn a down-stream task of interest with a significantly **reduced** amount of **labeled data**.

`https://research.tue.nl/en/publications/towards-federated-unsupervised-representation-learning`

Towards federated unsupervised representation learning

Summary version of **M.Sc thesis** including **additional** effectiveness **experiments**.

`https://dl.acm.org/doi/10.1145/3378679.3394530`

Workshop paper

ACM EdgeSys 2020

Millimeter Wave Sensing: A Review of Application Pipelines and Building Blocks

This literature review covers **millimeter wave sensing** application **pipelines** by analyzing different basic application pipeline **building blocks**, including hardware, algorithms, analytical models, and model evaluation techniques. The review also provides a **taxonomy** that highlights different millimeter wave sensing **application domains**. It extends previous investigations focused only on communication aspects of the millimeter wave technology and using millimeter wave technology for active imaging, **highlights scientific and technological challenges and trends, and provides a future perspective** for applications of millimeter wave as a sensing technology.

Journal paper

IEEE Sensors
Under review