

# Peter Bruinink

*Independent entrepreneur and software developer*

## About me

Born: 12 april 1962 in Velsen  
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## Education

### TU Delft - Aerospace Engineering

*1980 - 1986*

In 1986 I successfully graduated from the Faculty of Aerospace Engineering with the specialty materials and production techniques. My graduation work was a study into the formation of folds in the deep drawing of fabric-reinforced plastics. In those days I developed a 3D computer visualization for this.

## Knowledge and skills

I am an independent entrepreneur who for the past 10 years has mainly focused on developing Android and iOS apps mostly for medical, fitness and sports applications. I develop on my own or in teams mainly technical apps that are connected to 1 or more devices and communicate with Cloud applications. I also develop or aid in the development of embedded applications for Android, Nordic nRF52, TI SimpleLink or Arduino boards.

As an aerospace engineer, I have grown from developing applications for fiber-reinforced plastics at DSM, through designing and drawing products for Idem and Bentfield Europe, to developing software for embedded and desktop devices in my time with ChampionChip, that I co-founded. As an independent entrepreneur I continue to develop software. I enjoy using several different tools to achieve my goals.

Due to my experience as a board member of ChampionChip, I often look beyond just software development.

## Practical skills

<i>Skill</i>	<i>experience</i>	<i>when used</i>
Android	12 years	until now
Java	20 years	until now
Kotlin, Coroutines	5 years	until now
Swift, iOS	2 years	until now
Angular, Ionic, Capacitor	5 months	until now
Typescript, Javascript, NodeJS	4 jaar	until now
Flutter voor Android & iOS	5 months	2021

C	27 years	1994 - 2021
C++	10 years	1994 - 2004
C#	1 years	2015
Delphi	16 years	1998 - 2014
Bluetooth Classic, BLE, ANT+	12 years	2008 - 2021
RFID, NFC, Lora	24 years	1994 - 2018
SQL and NoSQL databases	24 years	until now
HTML, HTML5, CSS	14 years	until now
embedded systems (Nordic, TI, Arduino)	26 years	until now
Linux, macOS, Windows	26 years	until now
3D CAD	8 years	1988 - 1994, 2018 - until now
CI/CD (Jenkins, Github, Azure)	4 jaar	until now

## Languages

Dutch	native
English	fluent C2
Spanish	B1/B2
German	B1/B2

## My tools

My most important tools in 2022 are Android, Kotlin, Java, Flutter, Angular and TypeScript. In my work I make extensive use of my knowledge of network techniques such as TCP-IP, Bluetooth and ANT+. I am familiar with the various architectures such as Clean Architecture, MVVM and MVP and the use of Dagger or Hilt.

## Personality

I have a scientific mind. I love gathering knowledge, researching and finding practically feasible solutions in efficient algorithms and code.

I like to share my knowledge and I like to explain things.

I am strong in clear insights, reducing it to the essentials and I am always open to other and new insights.

I am someone with a lot of patience and will continue until the goal is reached.

## Experience

### Plusot, independent entrepreneur

*2009 until now*

As an independent entrepreneur I develop various applications for customers. The applications are mainly of a technical nature and are mostly aimed at the Android platform.

Examples of recently developed apps and apps I describe below.

### Vattenfall

*1 oktober 2021 - now*

Add Angular components via Capacitor to existing Vattenfall native Android & iOS apps.

**Tools:** Angular, Ionic, Capacitor, NX Mono Repo's, Node, Typescript, Android, Kotlin, iOS, Swift, Azure, Unit testing and E2E testing

Info: <https://vattenfall.com>

## Wehkamp Shop Android app for Wehkamp

*December 1, 2020 - June 1, 2021*

In the Android app team and a bit in the iOS team I contributed to the further development, expansion and testing of the app. I contributed to the constant modernization of the app, where we critically looked at the MVP architecture and moved from RxJava to Kotlin Coroutines. In an effort to improve the testing of app tagging and to let teams better cooperate I focused on the evaluation of ObservePoint in the CI / CD line.

**Tools:** Android, Java, Kotlin, RxJava, Coroutines, Swift, Dagger, Jenkins, Unit testing and UI testing (BrowserStack)

Info: <https://wehkamp.nl>

## Thp2 app for Thp2

*2013 until now*

The Thp2 app commissioned by Thp2 is an app for measuring fitness data with many different measuring devices. The most recent equipment that I have connected to this app are a push up tester, an HbA1c blood tester, a heart rate variation tester and a cotinine tester.

**Tools:** Android, Java, Kotlin, Arduino, Bluetooth Classic and Bluetooth Low Energy, Linux as update server

Info: <http://thp2.eu>

## Kien app for Kien

*2020, Januari - July*

Development of an Android app for controlling the Kien wireless sound system.

**Tools:** Android, Kotlin, Java, Bluetooth Low Energy, ESP32 and MPLAB tools, configuration of Linux update server

Info: <http://kien.io>

## Kaleido insulin pump app for Vicentra

*2019, September - November*

Kaleido app commissioned by ViCentra. The Kaleido app controls a Kaleido insulin pump. I developed a demo app in Android to show that an Android or iOS app can provide the same functionality as the so-called Kaleido terminal.

*2018, August - October*

An investigation into a secure Bluetooth Low Energy connection between Android / iOS devices and the Vicentra insulin pump. For this I wrote not only the Android app but also an app for the Nordic nRF52-DK development board.

**Tools:** Android, Kotlin, Bluetooth Low Energy, Segger Embedded Studio, C

Info: <http://helloworld.com>

## Dunlop app for the NEP Group

*2019, jan - april*

An embedded Android application that controls a camera on a bicycle for TV recordings and processes various sensor data in bicycle events like the Tour de France.

**Tools:** Android, Kotlin, Bluetooth Low Energy, 4G, Node JS on Linux server, HTML5, CSS

**Info:** <https://www.nepgroup.com/>

## LumiGuide

*2015 until now*

As a co-investor and as a technical expert, I support LumiGuide in devising and developing innovative solutions for the detection of bicycles in bicycle parkings and cars in parking lots.

For LumiGuide I have researched the possibilities and use of:

- LoRa as communication technology
- RFID as detection technology

In addition, I develop the Android and iOS bicycle parking availability apps.

**Tools:** Android, Kotlin, iOS, Swift, C, Arduino, LoRa, RFID, NodeJS on Linux server, HTML5, CSS, Linux Raspberry Pi, Beaglebone

**Info:** <http://lumi.guide>

## Toujeo and Diabetes 24 apps for Brons en Ten Kate / Sanofi

*2016 until now*

**Diabetes app:** The full development of an app to support diabetes patients for Sanofi Belgium. The app functions as a source of information, logbook of meals and insulin measurements and as advice tool.

**Toujeo app:** The Android source code from another development agency was transferred to me for maintenance and further development of the app. The Toujeo app is aimed at the correct use of Toujeo insulin for the Dutch Sanofi market.

**Tools:** Android, Java, Kotlin, Facebook api, Firebase, Crashlytics

**Info:** <https://www.bronstenkate.com/>

## Robin for MyTenga:

*2018, Augustus - September*

The development of an embedded Android application that controls a sex robot and provides speech. The robot responds to questions from the user. The manufacturer can remotely add new questions and answers to Robin.

**Tools:** Android, Kotlin, Google Spreadsheets api

**Info:** <https://www.motsudolls.nl/>

## Tink app for Foom

*2017*

**The Tink app:** An Android and embedded C application for the Texas Instrument Sensor Tag for making soap dispenser data with energy-efficient Bluetooth Low Energy motion sensors available to maintenance teams and available for statistical analysis.

**Tools:** Android, Java, C, TI Sensortag, NodeJS on Linux server

**Info:** <http://foom.eu>

## Other apps

*2009 - 2018*

Other apps that I have developed are:

**Strong Viking:** Android barcode scan app for Strong Viking events

**Parklopen:** Android barcode scan app for Parklopen event

**Vivax Data:** Android app to read ground radar data from the ground radars display.

**Meterz, uBike:** Android bicycle apps

**CChipStore:** RFID data registration for ChampionChip Catalunya sports events. Java application on Linux servers.

**Tools:** Android, Kotlin, Java, NeDB, Javascript, Node.js on Linux, Bluetooth, ANT+, Linux servers and Linux VMs, HTML, CSS

**Info:** <http://plusot.com>

## **HAN University of applied Sciences, Automotive engineering**

2015

I taught 2 seasons to 2nd year and minor students of the Arnhem - Nijmegen University of Applied Sciences in the Automotive Engineering program. There I took care of the lessons related to embedded programming in C..

**Tools:** C

## **ChampionChip / Mylaps**

1993 - 2009 / 2016

### **Founder and board member**

I was as one of the 4 founders and as a board member of ChampionChip BV responsible for R&D and HR. ChampionChip developed equipment for timekeeping at sporting events. As such, we were the global market leader in endurance events.

As head of the team, I developed C, C ++, Java and Delphi embedded software, desktop and server software.

At international conferences, which we organized for our customers, I provided training in the use of our equipment and software. Over the years, I have assisted our customers worldwide in timekeeping their most challenging events, such as the New York Marathon.

**Tools:** C, C++, Delphi, Java, Embedded Java, MS SQL Server, Windows, Linux servers, TI Code Composer, Beck embedded tools, Siemens embedded tools, SMS servers, HTML, CSS.

### **Sold and Mylaps**

At the end of 2008 we, as shareholders, sold ChampionChip, a company with 60 employees, to HAL investments. HAL has merged ChampionChip with the then world market leader of timekeeping in motorized sports: AMB. The two companies together have been called Mylaps since 2009.

Until 2016 I supported Mylaps.

**Tools:** Delphi, Java, Linux servers, MS SQL Server, MySql, Whatsapp api, Facebook api, SMS servers.

## **Bentfield Europe BV**

1992 - 1994

At Bentfield Europe BV I was responsible for designing industrial soap dispensers. The challenge was always to come up with a system that was patentable. This allowed Bentfield to be assured of the refill packaging market.

**Tools:** Solid Edge, AutoCad

## Brunot Design Tools

1992 - 1994

The one-man company Brunot Design Tools developed a simple finite element package (FEM) in C++ to enable designers to quickly calculate common structures for stiffness and strength. In this project I cooperated with Patrick Limpens.

In addition, Brunot Design Tools carried out 3D drawing and design assignments for customers.

**Tools:** C++, AutoCad, Solid Edge

## IDEM

1991 - 1992

IDEM was an industrial design agency. I was responsible for designing plastic products with CAD, CAE, FEM and flow modeling software. I also developed a program that converted IGES 3D files into STL files for 3D printing.

**Tools:** Ideas

## DSM Research

1986 - 1992

At DSM Research I worked as a project leader in the Material Technology (MT) group on the development of anti-ballistic helmets made of the super strong fiber Dyneema.

**Tools:** Pascal

## Other interests

Living with and enjoying a family with sons growing up, cycling, walking, reading, playing guitar, designing rings, modeling and holidays in our house in Spain (<https://casamontgri.net>)

**Tools:** Autodesk Fusion 360, Linux server, NodeJS, Apache, Wordpress, HTML, CSS