

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, Microchip PIC, ESP32 and 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

Flutter voor Android & iOS	3 months	until now
Android	12 years	until now
Java	20 years	until now
Kotlin	4 years	until now
C	27 years	until now
C++	10 years	1994 - 2004
C#	1 years	2015
Delphi	16 years	1998 - 2014

Swift	1 years	2017
Bluetooth Classic, BLE, ANT+	12 years	until now
RFID, NFC, Lora	24 years	1994 - 2018
SQL and NoSQL databases	24 years	until now
Javascript, NodeJS	4 years	until now
HTML, HTML5, CSS	14 years	until now
embedded systems (Nordic, TI, Arduino)	26 years	until now
Linux	20 years	until now
OSX	18 years	until now
Windows	30 years	2018
3D CAD	8 years	1988 - 1994, 2018 until now

Languages

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

My tools

My most important tools currently are Flutter, Android, Kotlin, Java and Node.js. In my work I make extensive use of my knowledge in the field of network technologies such as TCP/IP, Bluetooth and ANT +. For version management I use GitHub and BitBucket.

Flutter (<http://flutter.dev>) is a new, growing, well-functioning and well-supported environment to build cross platform applications for Android and iOS, among others. Something like Bluetooth Low Energy is very well supported.

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 where I perform maintenance are:

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 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 op 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