

# Gijsbert ter Horst

Software Developer

## personal

### sex

Male

### birth-date

March 25<sup>th</sup> 1991

## contact

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## languages

(native) Dutch  
English  
Norwegian  
(poor) German  
(worse) French

## programming

Typescript  
C# 12  
Angular 17  
MongoDB 7  
Javascript  
Python 3  
C  
SQL  
Lua  
PHP  
Java

## experience

2016–now

### Intar B.V.

*Software developer*

We create connect a low-code platform that makes it easy to automate complex processes for the non-technical end-user. (More below)

Seconded twice to Sigmax for a total of approximately two years for SQL queries, OAuth2 integration, AngularJS refactoring and optimisation, AngularJS to Angular rewrite, moving teams from TFS to git, Cypress e2e tests etc.

Both for Sigmax and for contracted work at Intar I worked for government municipalities mainly related to parking-permits and -exemptions.

Enschede, Netherlands

full-time

2014–2016

### Controllab Products B.V.

*Software developer / system administrator*

Enschede, Netherlands

part-time

- Implemented evaluation version of coupling between 20-sim and Matlab through Apache XMLRPC + Matlabcontrol.
- Created GCAT Evaluation, a test suite that *dynamically* verifies the correctness of C-code generated by 20-sim.
- Fixed several issues in 20-sim C-code generation that were detected by GCAT.
- Research on the possibilities of static analysis of the C-code generated by 20-sim, focused on MISRA C compliance.
- Automated tracking of issue tracker statistics, calculates and graphs related ISO9001 KPIs over time.
- Set up centralised user account system using Samba on redundant-failover Debian servers. This provides employees with one account that can login to both the windows and linux machines in the company.
- Set up groupware servers for e-mail and calendar, including e-mail virus scanning and spam filtering that adapts based on e-mails employees move to/from their spam folder.

2012–2017

### University of Twente

*Undergraduate Teaching Assistant*

Teaching, examining, and grading students.

- Operating Systems in 2012 & 2013
- Databases in 2013
- TOM: Data & Information in 2014
- TOM: Operating Systems in 2014–2016

*Twente Academy/Pre-U: Educational developer and teacher*

Pre-U (formerly Twente Academy) is the university's pre-university college.

- Developed and taught a Masterclass Hacking in 2013–2016
- Guidance of secondary school final projects in 2014–2017
- RED Engineers Challenge, primary school guest teacher in 2014

Enschede, Netherlands

zero-hour contract

2012–2019

### Personeelsservice Nederland B.V.

*Stock-taker*

Pays legal minimum wages, part of the company revenue is paid to charities.

Enschede, Netherlands

zero-hour contract

## software

LaTeX2e  
Visual Studio Code  
Git  
Docker  
OpenTofu  
Kubernetes  
Inkscape  
Dia  
GIMP  
Blender  
FreeCAD  
PrusaSlic3r  
LibreOffice  
Audacity  
FFmpeg  
CasparCG  
Bridge  
Wireshark

## hardware

Custom desktop  
Raspberry Pi's  
NVIDIA Jetson  
Prusa 3D printer

## operating systems

Debian  
Ubuntu  
OSMC  
Raspbian  
Alpine  
*Historical:*  
LMDE  
Linux Mint 13  
Ubuntu 9.10-11.04  
Windows 7

2009–now **THICT**

Boekelo, Netherlands

*Owner*

My own company, which is dormant right now.

- 2017: Developed a central heating system leak testing machine for Emergo Hout & Bouw B.V.
- 2010: Developed two machine interfaces for Beun- De Ronde B.V.
- Helpdesk and troubleshooting
- General IT advice (hardware, software, licensing, legal)

2007–2019 **DWN**

Netherlands

*Volunteer*

zero-hour contract

No wages, the company gives directly to charities for every hour worked.

- Technician at De Oude Usselerschool
  - Audio, video & stage lighting
  - Maintenance of technical facilities
  - Replaced analogue (PAL) video system with digital system in full HD.
- Stock-taker
- Minor jobs: cleaner, construction worker, crew marathon Enschede

2013–2014 **Bonhoeffer College location Bruggertstraat**

Enschede, Netherlands

Computer Science teacher

internship

A year later one of the computer science teachers who mentored me during the internship left, and I was offered the post. I had to turn down the offer at that time.

2008-2009 **PSS Development**

Stadskanaal, Netherlands

*Software Engineer*

full-time volunteer through A-Team Pagedal

- C# ASP.NET web applications
- T-SQL databases, design and coupling to legacy systems

## publications

2018

**Bachelor's thesis**

Proceedings of the 29<sup>th</sup> Twente Student Conference on IT

LoRa Passive Positioning: Analysis of the effects of various parameters on performance

## awards

2013

**Cake**

University of Twente, 19<sup>th</sup> Twente Student Conference on IT

Cake for *Best Poster and Explanation* for team project: Solver for GearSketch

2018

**Nomination**

University of Twente, 29<sup>th</sup> Twente Student Conference on IT

Nominated for Best Paper for bachelor's thesis

## communication skills

**software:** With design experience in software teams I am well versed in the discussions around design choices. I can explain and defend my choices, and accept when the final design will not be as I envisioned.

**client wishes:** I have done some work for my own company where I discuss the client's wishes with them. When I did live A/V work for parties, weddings or funerals I asked the client their wishes, and show what I can do for them. In written communication, I am proficient in both Dutch and English at various levels of formality from poignant memes on Discord up to EULAs and privacy policies.

**education:** With various jobs in education, I have experience in how to present information in a way that improves clarity and facilitates understanding, without undermining the factuality or accuracy of the material.

**accuracy:** When contracted for government municipalities I have seen how messy things get when the meaning of texts is eroded in a bid to be more accessible to every civilian, and the editors forget that such government publications are legally binding in the Netherlands. In those cases it is vital to be correct, *if necessary* at the cost of ease of understanding. Especially

now that it has become relatively easy to generate explanatory supplemental material using LLMs, which are often very good at working with complex texts, as long as they're correct and accurate.

**accessibility:** As noted above, government communication editors focus on the texts they send the citizens, and how the e-mail looks. The end-result looked correct, and this was fine for printed letters, but the underlying code often was a mess. I then transformed those texts into strictly semantic HTML, such that the e-mails based on those templates not only looked correct, but could be understood by assistive technology such as screen readers and braille-displays.

**print production:** Though not particularly talented at graphical design, I have some insight into the process of transferring digital media to print, using free tools such as GIMP, Inkscape,  $\text{\LaTeX}$ , etcetera. With the rise of generative AI, these skills have become unexpectedly more relevant. The AI can provide artistry to non-artistically skilled users, but it cannot (yet) provide the link to production of the generated works.

## interests

**professional:** information security, system security, UNIX-like operating systems, computer hardware, software, FOSS software, software licenses, information law, source management, self-hosted / edge AI

**personal:** books (fantasy, sci-fi), hacking hardware and software, GNU/Linux, Raspberry Pi, rocket science, 3D-printing, and many other things

**religious:** Brunstad Christian Church