

# Léon van Velzen



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Location: Leiden

## Personal Profile

Known by friends as an avid traveler, a motivated student and a good companion. The only thing coming close to my passion for travel, is my love for understanding. At a young age this drive made me study the workings of computers. This led to a deep understanding of computer systems and programming languages. Always seeking a more difficult challenge, I committed to understand the universe, which meant becoming a physicist.

## Work Experience

2015 - 2017, ChannelEngine [www.channelengine.com](https://www.channelengine.com)

- Supported a startup to scale and improve revenue by refining the C# software architecture
- Greatly improved the efficiency of the import and export of product data that flows through the system daily
- Designed and implemented most of the new (version 2.0) API
- Integrated third party marketplaces like Bol.com, CDiscount and Ebay to our platform

## Education

09/2020, Master Applied Physics (Physics for Instrumentation), TU Delft

2017-2020, Physics Bachelor, Leiden University

- Followed Advanced Theory Track (extracurricular problems sets)
- Graduation most likely cum laude (current average 8.9)
- Bachelor Thesis on 'Laser Induced Plasma' with a scientific publication following in the summer

2019, Exchange Program, University of British Columbia (Canada)

- Followed courses in engineering, maths and physics (average 8.8)
- Improved English speaking skills

2018, Circuits and Electronics (1, 2 & 3) edX online course, provided by MIT

2017-2018, Physics Propedeuse, Leiden University

- Cum laude (average 8.9)

2017-2018, Computer Science Propedeuse, Leiden University

- Cum laude (average 9.1)

2016, Pre-University Classes Computer Science, Leiden University

2010 - 2016, Atheneum, Visser 't Hooft Lyceum Leiden

- Graduated magna cum laude (average 8.7)
- National mathematics (wiskunde B) final exam made without any errors

## Interests

Traveling

- Backpacked New-Zealand for six months after high school
- Member of a travel society (AEGEE-Leiden)

Sport

- Indoor fitness, indoor soccer and running

## Skills

Languages

- Dutch (native), English, Italian

Programming languages

- High proficiency: Python, C, JavaScript (web development in general)
- Moderate proficiency: Idris, Haskell, Lisp, C#

## Software Projects

Pyka Programming Language (work in progress) [github.com/leon-vv/Pyka](https://github.com/leon-vv/Pyka)

- Improve and generalize the structure of the popular Scheme and Common Lisp programming languages
- Using 'first class environments' the Pyka language can elegantly combine dynamic and lexical scoping and even reproduce the meta programming system of Common Lisp.
- Written in Python and Pyka (a Lisp language).

To-do [github.com/leon-vv/ToDo](https://github.com/leon-vv/ToDo)

- By expressing a subset of the SQL database language in a dependent type system this project illustrates how advanced proofs about database access can be verified at compile time.
- Written in Idris.