

Jesse van den Kieboom

contact

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Born '84, Breda
The Netherlands

languages

Dutch – mother tongue
English – fluent
French – conversational
German – minor

programming

Go, C, C++, C#,
Python, Ruby, Vala,
JavaScript, PHP,
CoffeeScript

education

2009–2014 **PhD in robotics** EPFL, Lausanne, Switzerland

On the dynamics of human locomotion and the co-design of lower limb assistive devices

PhD thesis carried out at the Biorobotics Laboratory. The work presented in this thesis investigate the underlying criteria of human gait optimization. The work resulted in a novel, state of the art software framework for the modeling and simulation of coupled dynamical systems (*codyn*), as well as a framework for performing distributed, population based optimizations. Both are made available under open source licenses.

<http://thesis.codyn.net/> – <http://www.codyn.net/> – <http://optimization.codyn.net/>

2008–2009 **Master thesis** EPFL, Lausanne, Switzerland

Biped Locomotion and Stabilization – A Practical Approach

Master thesis carried out at the Biorobotics Laboratory. This work explores the use of optimization algorithms to optimize central pattern generators for 3D walking and stabilization of a HOAP-2 robot in simulation. The thesis is available at <http://biorob.epfl.ch/>.

2007–2009 **Master of science in Artificial Intelligence** RUG, Groningen, The Netherlands

Master degree in Artificial Intelligence obtained at the Rijksuniversiteit of Groningen.

2003–2006 **Bachelor in Artificial Intelligence** RUG, Groningen, The Netherlands

Bachelor degree in Artificial Intelligence obtained at the Rijksuniversiteit of Groningen.

experience

2006–2009 **Novowork** Groningen, The Netherlands

Director and lead software developer. Novowork was a self-founded company which specialized in the development of highly customized on-line questionnaires, in particular for the purpose of sociological studies. Novowork provided an end-to-end solution for digitalization, customization, publication, data collection and customized reporting. As the sole owner and employee, my work involved all facets of maintaining a small company, including finding and interacting with clients, software development and small scale accounting.

2005–2008 **ZooEasy** Groningen, The Netherlands (<http://www.zooeasy.com/>)

Lead software developer. ZooEasy develops software for the (semi-) professional animal breeder, focusing on administration, medical results and shows. My work during this time involved:

- Development of new functionality based on specifications.
- General maintenance and bug fixing.
- Development of backend management tools (issue tracker, calendar, work hour management, etc.).
- Development of the prototype for the online version of ZooEasy.

open source contributions

2013–now **cldoc**

<https://jessedvdk.github.io/cldoc>

Author. cldoc is a documentation generator for C and C++, written in Python, focusing on precise documentation requiring minimal effort and minimal configuration. Leveraging libclang/llvm to parse source code, documentation can be extracted for symbols robustly. The generated documentation can be easily integrated dynamically into an existing web-site.

2012–now **go-flags**

<https://github.com/jessevdk/go-flags>

Author. go-flags is a comprehensive command line argument parser package for the Go language. It focuses on ease of use, utilizing the Go language's reflection capabilities. Apart from basic command line parsing it also includes support for commands, builtin help generation, man-page generation and automatic command line argument completion.

2008–now **gitg**

<https://git.gnome.org/browse/gitg>

Author. gitg is a graphical user interface for the git version control system on the GNOME desktop. It is particularly useful for the visualization of a repository's history, as well as for staging and committing changes.

2006–now **gedit**

<https://git.gnome.org/browse/gedit>

Developer, maintainer. gedit is the default text editor for the GNOME desktop environment. It focuses on providing a simple text editing experience by default, but allows to be extended by plugins for more advanced editing features. Apart from general maintenance, my work involved the development of plugins such as the file browser, snippets, multi editing, code assistance, collaboration, quick open, and others.

awards

2005 **Winner Dutch RoboChallenge 2005**

Groningen, The Netherlands

Member of the winning team of the Dutch RoboChallenge 2005, a mobile robot competition with a self-designed, manufactured and controlled robotic platform.

professional interests

software design, developer tools, robotics, systems modeling, artificial intelligence, linux

personal interests

guitar, cycling, tennis, open source, computer graphics