

# Stijn Van Caekenberghe

Electrical Engineer

## about

Born April 16th, 1988  
in Vilvoorde

<http://onvoltooid.be/>  
LinkedIn

## languages

Dutch \*\*\*\*  
English \*\*\*\*  
French \*\*\*  
German \*

## technical skills

Matlab \*\*\*\*  
Simulink \*\*\*  
  
C \*\*\*\*  
Python \*\*\*\*  
Java \*

Verilog \*\*\*\*  
SystemC \*\*\*  
VHDL \*\*

## interests

physical layer networking, digital signal processing, digital electronics

## experience

- 2011-current **DSL Firmware Engineer** Broadcom, Mechelen  
DSP algorithm development and FPGA development for G.vector and G.fast chipsets. Involved in the G.fast firmware project from the start. Collaborating at UNH IOL to reach interoperability.
- 2010-2011 **Intern** IMEC, Leuven  
Master's thesis on filterbank multicarrier for next generation wireless communication.
- 2010 **Intern** Broadcom, Mechelen  
Internship at Broadcom's DSL team.
- 2009 **Intern** Alcatel-Lucent, Antwerpen  
Internship at ALU's DSL team.

## education

- 2009-2011 **M.Sc. Electrical Engineering** Katholieke Universiteit Leuven  
*Magna cum laude.*
- 2010-2011 **M.Sc. Electrical Engineering** Université catholique de Louvain  
Dual degree with Katholieke Universiteit Leuven
- 2006-2009 **B.Sc. Electrical Engineering** Katholieke Universiteit Leuven  
Minor in Computer Science

## volunteering

- 2014-current **CoderDojo Belgium** Mechelen, Bornem, Dilbeek  
Teaching electronics to children with Arduino. Lead coach at CoderDojo Klein-Brabant
- 2014-current **Erfgoedkring Berla** Meise  
Setup and Maintenance of an archiving system (Omeka)

## publications

- Preamble-based frequency-domain joint CFO and STO estimation for OQAM-based filter bank multicarrier  
Stijn Van Caekenberghe, André Bourdoux, Liesbet Van der Perre, Jérôme Louveaux  
EURASIP Journal on Advances in Signal Processing 2014.1 (2014). Springer International Publishing, 2014
- Preamble-based channel estimation for filterbank multicarrier wireless systems  
Stijn Van Caekenberghe, Sofie Pollin, André Bourdoux, Liesbet Van der Perre, Jérôme Louveaux  
32nd WIC Symposium on Information Theory in the Benelux (2011). Brussels, Belgium, 2011