

# Bram Leenders

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## Education

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<b>Royal Institute of Technology (KTH)</b> <i>Master ICT Innovation (double degree program), in progress</i> Specialization: Data Intensive Computing	<b>Stockholm, Sweden</b> 2015–2016
<b>Technische Universität Berlin</b> <i>Master ICT Innovation (double degree program)</i> Track: Distributed Systems and Services	<b>Berlin, Germany</b> 2014–2015
<b>University of Twente</b> <i>Bachelor Computer Science</i> Minor: Social and Technological Philosophy	<b>Enschede, The Netherlands</b> 2011–2014
<b>University of Twente</b> <i>Excellence Stream Mathematics</i> An additional mathematics track, consisting of 6 modules and a final thesis. The research topic for my thesis was: “Size of Very Large Euclidean Minimal Spanning Trees with Power Weighted Edges”.	<b>Enschede, The Netherlands</b> 2011–2014
<b>NIBHV/Santar</b> <i>Emergency Response Officer</i> Extended certification, i.e. basic first aid, extended first aid and basic fire-fighting.	<b>Enschede, The Netherlands</b> 2012, yearly re-certified
<b>Marnix College</b> <i>Gymnasium</i> Track: Science and Technology. Elective courses: Latin, German and Nature, Life and Technology	<b>Ede, The Netherlands</b> 2005–2011

## Publications

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### Distributed Searchable Symmetric Encryption (2014).....

**Authors:** Bösch, C.T. and Peter, A. and Leenders, B. and Lim, Hoon Wei and Tang, Qiang and Wang, Huaxiong and Hartel, P.H. and Jonker, W.

**Published:** Twelfth Annual International Conference on Privacy, Security and Trust, PST 2014, 23-24 July 2014, Toronto, Canada. pp. 330-337. IEEE. ISBN 978-1-4799-3502-4

**Description:** We propose a new scheme for Distributed Searchable Symmetric Encryption that hides the contents of files, the queries and the search pattern.

### Simple and Efficient Searchable Symmetric Encryption with Application (2014).....

**Best Paper Award:** Data and Application Integration Track, Twente Student Conference on IT

**Authors:** Leenders, B.

**Supervisors:** Peter, A. and van Keulen, M.

**Description:** We propose a new searchable symmetric encryption (SSE) scheme, which guarantees data-confidentiality but preserves search capabilities on the encrypted data. Our scheme is simple, yet more efficient than the state-of-the-art solution at the time of writing. We discuss the security and performance of SSE schemes in general, compared to other types of encryption.

## Experience

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### Work.....

#### **SICS Swedish ICT**

**Stockholm**

*Intern*

*2015-2016*

Internship&thesis project focussing on implementing heterogeneous storage in HopsFS, a more scalable alternative to the Hadoop filesystem.

#### **Gambify GmbH**

**Berlin**

*Backend developer*

*2015*

Building a new backend for the Gambify app on top of hapi, a Node.js framework. Gambify is a social betting app, which allows groups of friends to bet on sports. I worked in a team of three programmers on a complete redesign and rewrite of the old backend to allow scaling.

#### **University of Twente**

**Enschede**

*Flex worker in various positions*

*2011-2014*

- *Student assistant, Course Information project:* define aims and descriptions of bachelor and master courses of the faculty EWI.
- *Emergency Response Officer:* assessing emergency situations and giving first aid, evacuating and/or basic fire-fighting.
- *Student assistant, Data and Information module:* evaluating the use of the Ruby on Rails framework for a practical assignment in a new module.

#### **Van Den Tweel Groep BV**

**Bennekom**

*Store employee*

*2009-2011*

Part-time employee in a large supermarket, my responsibilities were the logistics and supply of the fruit and vegetable department.

### Projects.....

**Trend and Topic Detection on Hacker News:** Data analytics on the articles posted on Hacker News, using Apache Spark and unsupervised machine learning.

**ScienceChallenges:** Co-founder of the ScienceChallenges concept, an enhancement of education at Twente University.

**Mini-DBMS:** With two fellow students, I created a basic database system. We programmed all core functions, including parsing, query optimization, execution engine, index structures and storage.

### Student Activism.....

#### **I.C.T.S.V. Inter-Actief**

**Enschede**

*Chairman Symposium Committee, SimulatIT*

*2013-2014*

Organization and execution of the annual Inter-Actief symposium (170 participants), which includes acquiring sponsors and speakers, promotional activities and budgeting.

#### **I.C.T.S.V. Inter-Actief**

**Enschede**

*Member/Chairman/Vice-chairman Committee Lectures and Excursions*

*2011-2014*

As chairman, I managed a group of ten students and trained my successor. As member, my tasks included the planning, promoting and facilitating of excursions, workshops and weekly lectures for students. This included extensive contact with various companies to acquire sponsoring and speakers.

## Languages

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**Dutch:** Native proficiency

**English:** Full professional proficiency

*TOEFL score: 114 out of 120 points*

**German:** Working proficiency