

## CV

### Søren Kejser Jensen

Email: soeren@kejserjensen.dk

Homepage: www.kejserjensen.dk



### Resume

My primary interest is in computer science and especially the intersection between database management systems and programming. This is reflected by my work on both data management and implementation of programming languages at Aalborg University. I enjoy performing an in-depth analysis of existing systems and problems to get a clear understanding of how to solve a particular task with the best solution possible.

### Education

#### 2015-2019 Doctor of Philosophy (PhD) in Computer Science, Aalborg University

- Supervisor: *Professor Torben Bach Pedersen*
- Co-Supervisor: *Associate Professor Christian Thomsen*
- Thesis Topic: *Model-based Time Series Management at Scale*
- Committee:
  - *Associate Professor Simonas Šaltenis (Aalborg University)*
  - *Professor Klemens Böhm (Karlsruhe Institute of Technology)*
  - *Associate Professor Yongluan Zhou (Copenhagen University)*
- Defended: *4th of November 2019*

#### 2013-2015 Master of Science (MSc) in Computer Science, Aalborg University

- Specialization: *Programming Technology*
- Master Thesis: *Unifying STM and Side Effects in Clojure*
- Published: *Extending Software Transactional Memory in Clojure with Side-Effects and Transaction Control, Proceedings of the 9th European Lisp Symposium, ELSAA, 2016*
- Followed supplementary **PhD** courses:
  - *Programming Supercomputers*
  - *Semantic Web Warehousing*
  - *Modern Analytical Database Technology*

#### 2010-2013 Bachelor of Science (BSc) in Computer Science, Aalborg University

- Bachelor Thesis: *A Hierarchical Model for Continuous Gesture Recognition Using Kinect*
- Published: *A Hierarchical Model for Continuous Gesture Recognition Using Kinect, Twelfth Scandinavian Conference on Artificial Intelligence, IOS Press, 2013*

#### 2007-2010 HTX, Communication and Social Studies, Erhvervsskolerne Aars

## Employment

**2018-**        **Research Assistant**, Department of Computer Science, Aalborg University  
Working on *ModelarDB*, a distributed model-based time series management system that I developed during my PhD which can manage large data sets of time series at scale.

**2013-2015**    **Student Developer**, Department of Computer Science, Aalborg University  
Documented the Python-based ETL framework *pygrametl*, and extended it with additional capabilities, for example, support for Type 1 Slowly Changing Dimensions.

## Technical Skills

- Algorithms, Compilers, Data Structures, Interpreters, Machine Intelligence
- Database Management Systems, Data Warehousing, Extract Transform Load (ETL)
- Functional Programming, Imperative Programming, Object-Oriented Programming
- Concurrent Programming, Parallel Programming, Distributed Systems
  
- Apache Cassandra, Apache Kudu, Apache Hadoop, Apache Spark
- GNU Emacs, Git, GitHub, GitLab, LaTeX, PostgreSQL, Pygrametl, Vim
- BSD, Linux, macOS, Windows

## Programming Languages

### Professional Level

- C, C++, C#, Java, Python, Scala

### Intermediate Level

- Bash, Clojure, Emacs Lisp, Haskell, Rust, SQL, Vimscript

### Novice Level

- Erlang, Go, F#, OCaml, R, x86\_64 Assembly Language

## Languages

### Native Speaker

- Danish

### Professional Level

- English

## Private

In my spare time I like to cook, experiment with homebrewing, and to go on leisurely bicycle rides. As a supplement to my professional work, I read technical books, scientific papers, and develop open-source software, for both recreation and to learn new technical skills.