CV

Søren Kejser Jensen

E-mail: soeren@kejserjensen.dk
Homepage: www.kejserjensen.dk

Resume

My primary interest is computer science, and especially data management, programming language design, and compilers. This is reflected by my work on both data management systems and the implementation of programming languages at Aalborg University. I enjoy performing a very in-depth analysis of a problem and any existing solutions before solving a particular task with the best solution possible given the constraints imposed by the domain.

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)*

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

- Specialization: *Programming Technology*
- Master Thesis: *Unifying STM and Side Effects in Clojure*
- Published as: *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 as: *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

2024- **Assistant Professor (TT)**, Department of Computer Science, Aalborg University
Working on extending *ModelarDB*'s compression and making it both fault-tolerant and efficient. I also teach data management, language design, and compiler implementation.

2021-2024 **Postdoc**, Department of Computer Science, Aalborg University
Extended *ModelarDB* into a platform for managing time series across edge and cloud.

2018- **Co-founder and CTO,** ModelarData
Working on making *ModelarDB* a mature and robust time series management system.

2018-2021 **Research Assistant**, Department of Computer Science, Aalborg University
Helped acquire funding from Horizon 2020 and made *ModelarDB* also run on the edge.

2013-2015 **Student Developer**, Department of Computer Science, Aalborg University
Documented and extended the Python-based programmatic ETL framework *pygrametl*

Technical Skills

- Algorithms, Compilers, Data Structures, Interpreters, Machine Intelligence
- Database Management Systems, Data Warehousing, Extract Transform Load (ETL)
- Functional Programing, Imperative Programming, Object-Oriented Programming
- Concurrent Programming, Parallel Programming, Distributed Systems
- Apache Arrow, Apache Cassandra, Apache Hadoop, Apache Spark, H2
- GNU Emacs, Git, GitHub, GitLab, LaTeX, Neovim, PostgreSQL, pygrametl
- FreeBSD, Linux-based Operating Systems, macOS, Microsoft Windows

Programming Languages

Professional Level: C++, Java, Python, Rust, Scala
Intermediate Level: Bash, C, C#, Clojure, Emacs Lisp, Haskell, SQL, Vimscript, Zig
Novice Level: Erlang, F#, Go, Lua, OCaml, R, Ruby, x86_64 Assembly Language

Languages

Native Speaker

- Danish

Professional Level

- English

Private

In my spare time I like to cook, experiment with homebrewing, and go on long 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.