

# Curriculum Vitae

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**Jan Marthedal Rasmussen**

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## Profile

I have been programming for more than 25 years, professionally more than 13. I consider myself a pragmatic programmer, but with very solid, theoretical skills that allow me to solve complex problems, when needed.

I am a big fan of the web. Anyone can make content and functionality available to everyone on the web. Sharing with each other and getting inspiration from each other's work is easy and helps drive the web forward with tremendous speed. Technologies such as browser capabilities, javascript and web frameworks evolve very rapidly and it is interesting and fascinating to observe what is happening in these areas.

Another great passion of mine is mathematics, leading to a Ph.D. in applied mathematics. I will continually explore areas such as typesetting mathematics, computing solutions efficiently and teaching mathematics.

Born in 1975, married with 3 children, practises brasilian jiu-jitsu.

## Employment

- **SputSoft** 2017–present  
Freelance Web Developer.
- **HifiShark** 2016–2017  
Web Developer. Docker, ElasticSearch, Java, web scraping, PHP/Symfony, JavaScript, Backbone.js.
- **Design Science** 2014–2016  
Software Engineer. Typesetting and adding functionality to mathematics on the web. Frontend web stuff as well as backend work related to web services such as equation rendering and markup conversion.
- **Kapow Software** 2012–2014  
Principal Software Engineer. Java, JavaScript, Backbone.js, browser backends, Webkit, Qt, C++.
- **Syosil** 2011–2012  
Software Engineer. Hardware verification, C++, Python, static analysis of VHDL source code.
- **Department of Mathematics, DTU** 2010–2011

Teaching assistant in the course “Advanced Engineering Mathematics 1”. Elementary linear algebra and mathematical analysis.

- **TracTrac** 2008–2011

Software Developer. Java, GPS, geometry, parallel/distributed programming, real-time data streaming, relational databases, TCP/IP, GUI.

- **SputSoft** 2006–2008

Computer Science Consultant in own, one-man company. Developer for Danware Data, TracTrac and AutoCom.

- **Mobile People** 2006

Software Developer. Java, cell/smart phones.

- **Danware Data (now Netop)** 2004–2006

Software Developer. C++, Linux X-Server, raster graphics, desktop sharing.

## Education

- **Online courses (MOOC)**

- Automata (2013, statement)
- HTML5 Game Development (2013, statement)
- Algorithms: Design and Analysis, Part 2 (2013, statement)
- Games without Chance: Combinatorial Game Theory (2013, statement)
- Functional Programming Principles in Scala (2012, statement)
- Algorithms: Design and Analysis, Part 1 (2012, statement)

- **Ph.D. in Applied Mathematics, DTU** 2001–2004

Thesis: Boundary Control of Linear Evolution PDEs - Continuous and Discrete (available online).

- **Master of Science in Engineering, DTU** 1995–2001

Thesis: Krylov Subspace Methods for Linear Compact Operators (pdf).

## Skills

### Programming Languages

- ★★☆ C++
- ★★★★ Java
- ★★★★ JavaScript
- ★★☆ Matlab
- ★☆☆ Perl
- ★★☆ PHP
- ★★★★ Python
- ★★★★ TypeScript

### Web Development

- ★★★★ Backbone.js
- ★★☆ Bootstrap
- ★★☆ CSS
- ★★★★ HTML(5)
- ★★★★ Django
- ★★★★ Mathjax.js
- ★☆☆ React
- ★★★★ REST

## Operating Systems and DevOps

- ★★☆ Bash
- ★☆☆ Docker
- ★★★★ Linux
- ★☆☆ OS X
- ★☆☆ Windows

## Databases

- ★☆☆ CouchDB
- ★☆☆ ElasticSearch
- ★☆☆ MongoDB
- ★★☆ MySQL

## Markup Languages

- ★★★★ JSON
- ★★★★ (La)TeX
- ★★☆ MathML
- ★★☆ XML

## Version Control Systems

- ★★☆ Git
- ★★☆ SVN