

Rickard Eilert

SW Developer Presales Project Manager Product Owner



PERSONAL SUMMARY

Computer engineer with positive attitude. Been programming for 27 years. Experience as developer, architect, project manager, product owner, and presales.

Can discuss business deals, project roadmaps, and technical implementation details with customers and partners.

Interested in optimising projects, involving multi-site teams, multi-vendors, information sharing, risks, hard deadlines, budgets and people with different personalities and responsibilities.

Looking for interesting job opportunities in software companies as a self-employed consultant.

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Located in Luxembourg, Stockholm, Malmö
Born 1987 in Växjö Sweden

Fluent: Swedish English German

Good: French Italian Spanish

Novice: Portuguese Slavic Icelandic

WORK EXPERIENCE

Game Engine Developer at REAB

2023 – 2024

In C++, developed a web browser, JS interpreter, custom game engine to make a real-time strategy game.

Frontend Playback Engineer at Telia

2019 – 2023

Helped Telia transition from plugin-based video players to MSE/EME. HTML5 frontend development and especially JavaScript players integration and tweaking of dash.js on teliaplay.se and shaka.js on Chromecast. STB (set-top boxes) and SmartTV UI development. Youbora statistics integration. Familiarity with broadcast systems, video encoding, packaging, streaming, ad tech, subtitles, DRM, dash, smooth, hls, STB optimisations.

Product and Tech Sales Architect at Zenterio

Jan – Aug 2019

Meetings with partners, current customers, and new customers all over Europe and Middle East, to discuss potential business deals. Zenterio provided software for STBs. Part of the product team, which steered the development to fit customers demands. Developed own demos for sales meetings, discussed technical details and made time and cost estimations. Lead a UI design research with university UX students. Developed a fast HTML UI to showcase incredible performance on low-end STBs. Unfortunately, Zenterio failed to acquire planned investments, which lead to the bankruptcy of the company and an abrupt end to promising businesses.

Product Owner & Project Manager at Zenterio

2017 – 2019

Responsible for strategy, technical planning, budgeting, integration and optimisations of web browsers on various embedded platforms. Prioritised to make sure requirements and deadlines were met by keeping in daily contact with customers and developers on several sites. Lead integration of Cobalt browser and certification of YouTube TV app on STBs. Furthermore, lead the integration of WPE (WebKit Platform Embedded), and made it compatible with legacy apps using MSE+EME (dashplayer, hasplayer). Was a hectic year, which included overtime and weekly travelling between developers in Linköping, Belgrade, customer + development teams at Deutsche Telekom in Darmstadt, and partners at Metrological in Rotterdam.

Integration Expert at Deutsche Telekom

2016 – 2017

Two years on site at Deutsche Telekom's offices in Darmstadt Germany. All-knower, involved in more or less all activities in the project. Helped Zenterio to create an abstraction of Huawei's backend APIs, and helped Telekom's UI Team to write an HTML UI for the Zenterio OS, using mentioned APIs + STB-control APIs. Clarified requirements, implemented features, demonstrated new deliveries for Telekom employees, participated in troubleshooting and performance-improving taskforces. Involved in porting twenty apps to the Zenterio platform, including Telekom HTML5 apps, Sky, YouTube, Netflix, Amazon, and more.

Software Engineer at Zenterio

2015 – 2016

Analysing customer requirements and programming the backend of JS APIs in C++. Developed an HTML5 application used for testing all JavaScript APIs which became a crucial part of the company's workflow, and used by hundreds of developers, testers and customers every day.

Software Engineer at Systemagic

2014 – 2015

Working on in-house projects, designing and implementing a framework for cross-TV-platform HTML5 app development. It provides a JavaScript library that works for many TV platforms by wrapping their platform-specific code, and it has a build system written in Python, which creates a package for each TV platform. Researched HTML5 run-time performance and web browser inner workings.

Software Developer at Opera Software

2009 – 2011

Wrote a presentation-creating HTML5 app (like Google Slides/ PowerPoint). It pushed the limits on what was possible and resulted in a list of feature requests and bug reports for Opera Presto which lead to Opera becoming more standards-compliant. Also solved bugs in the Bream UI, which improved the user experience in Opera Mobile/Mini for hundreds of millions of users. Worked full time from the office in Linköping during summers, and remote with colleagues in Linköping, Oslo, Wrocław at 10h/week whilst studying.

Student Counselor at Linköping University

2009 – 2011

Arranged events for presumptive and current IT students, giving advice concerning career and specialisation opportunities, informed about student aid, scholarships, had performance reviews with all freshmen, gathered statistics and proposed improvements for the IT programs to the Study Board. 10h/week.

Web Community Developer at Staffan Wadsworth AB

2008 – 2009

Worked on Swedish web community called poeter.se. Implemented feature requests from users and improved security and integrity by managing passwords better. HTML5, PHP and MySQL. 10h/week.

Software Developer at Crepido

Summer 2007

Improved an ERP system written in HTML5, PHP and MySQL so that it could be sold to customers.

COMPETENCE DOMAINS

Browser Development	HTML5 & JavaScript	Presales
Game Dev, Gimp, SDL	Network Protocols	Project Management
Computer Graphics, OpenGL	Distributed systems	Product Management
Software Performance	PHP CGI NodeJS SQL	Team Management
Parsers, Compilers, AST	Setup OS, LAMP, Filesystems	Cost Estimation
Asm, VHDL, Microinstr	Linux Android Windows	Time Estimation
Design patterns	IPTV	Requirement Specification
C/C++, Ada, Pascal, Basic, VBA	Language Technology	Emacs, Eclipse, cvs, svn, git
Java, Python, Lisp, Prolog, AI	Programming Paradigms	Jira, Crucible, jenkins

ACADEMIC QUALIFICATIONS

European Languages	2012 – 2014
Linköping University, Albert-Ludwigs-Uni Freiburg	
Master in Computer Engineering	2010 – 2012
Linköping University, École Polytechnique de Montréal	
Military Service (Conscription)	2008
Comm. Squad Leader at Leadership Reg. Enköping	
Bachelor in Computer Engineering	2006 – 2010
University of Linköping	
Upper Secondary Science Maths IT	2003 – 2006
Katedralskolan Växjö	

LEISURE

- Travel, spend time in international environments, and lived in several countries to satisfy passion for learning languages.
- Always programming hobby projects.
- Gymming, running.
- Interested in psychology, AI, philosophy, economy, and politics.

MISCELLANEOUS

- Started and presided programming group during upper secondary school for 3 years. Regular programming meetings including snack sponsored by the school.
- Competed twice in the Swedish qualifications for the International Olympics in Informatics. Was among top 10 in Sweden. Won a programming scholarship in upper secondary school.
- Won some money taking part in [IMPA](#) and a sorting algorithm competition arranged by [PicSearch](#)

UNPAID/ HOBBY/ STUDIES PROGRAMMING PROJECTS

Web Browser 2015 – 2024

Web browser in C++ for creating gui components for games. Includes parsing of CSS, HTML and JS, building of a DOM, computing CSS, construction of a render tree, layouting, painting in different raster buffers, uploading to textures, and finally render with the GPU. CSS pseudo-classes, transitions and its JavaScript Interpreter with DOM bindings can dynamically change the content of the page. The end result is a customisable web browser which is fast and has a small memory footprint. It can be integrated into other projects, and be used on low-end embedded systems. It is comparable to Google's Cobalt web browser. Profoundly learned about CSS, HTML, JavaScript, and inner workings of web browsers.

JavaScript Interpreter 2016– 2024

A JavaScript Interpreter in C++ which parses code into an Abstract Syntax Tree and then executes it. It has support for most commonly used features in newer JavaScript versions. It is easily extendible, and with an extremely small footprint, it is made to be integrated into other projects. There are plans to add a JIT-compiler but still not clear for which architecture.

Web application ecosystem 2008 – 2024

Developed an advanced suite of modular JS apps, a JS library and server-side PHP scripts talking to a MySQL database. It resides on my own web/cloud server. Some web apps in the suite:

- A window system where multiple instances of all the below mentioned apps can be started and run in movable and resizable windows
- Clone of the popular game Civilization, built with 4000 lines of JS code
- Chat app
- Media player using the YouTube API to gain access to all its media collection
- Blog

- Colour picker
- File browser
- Glossary rehearsal program
- Editor with syntax highlighting
- A Javascript executioner
- Shopping list app

Grand Strategy Game 2024

Lead armies with thousands of units over the European continent. C++, multiplayer, good AI, pinch zoom.

Platform Game 2020 – 2023

Parallax scrolling platform game with level editor in C++.

Real Time Strategy Game 2007, 2013 – 2014

Romans and Barbarians I and II are games resembling Age of Empires. They is written in platform independent C++ using SDL, has network support for up to 16 players, advanced pathfinding algorithm, and very low system requirements. The sequel has better graphics, fog of war, hills, more units, and a map editor.

RSDL2 2013 – 2015

Developed a C++ library which wraps SDL2 and adds methods usually needed when developing graphical programs. It includes a whole system of GUI objects, their events, updates and graphics.

Chess Game 2012

Written in C++ and SDL. The AI uses the min-max algorithm and alpha-beta pruning. It usually defeats me.

Design Pattern Analyser 2012

As part of a PhD team in Canada, a program was written which analyses C++ code to find occurrences of design patterns. It also tries to find anti-patterns to propose refactoring of code.

PolyBanque 2011

A distributed application written in Java. Clients simulate different banks and are started on different computers communicating over TCP. Any client can be crashed anytime. Even so, the programs manage to keep their money data from corruption and transactions atomic.

Language Translator 2011

A program that identifies lemmas, part-of-speech, parses sentences into tree-structures which then are translated with a dictionary, and the word order is changed if necessary.

Raptor 2 2011

3D shoot 'em up game. Written in C++, OpenGL and SDL.

Köttkvarnen 2010

A 14 MHz computer built on four small Programmable Logic Devices programmed using VHDL and ModelSim. It had video output to a TV through a scart cable, and input came from an old computer keyboard. Special assembler instructions copied graphical tiles fast. It worked like a Super Nintendo.

Yxmördarn 2010

Robot built by in a team at the university more or less from scratch using low-level C code, JTAG and ATmega16 processors. It could drive around and shoot a laser.

Android app 2009

Wrote an Android app to manage projects with deadlines, milestones, members, documents, etc.

Bloodbath 2008

A clone of the popular game Liero where two worms in real time are trying to kill each other with a grand arsenal of weapons. C++ SDL.

Tetris 2007

Wrote a Tetris clone in Ada supporting network play for 2 players.

RiS 2006

Designed a language called RiS and developed an interpreter for it in Lisp. The language looked a lot like JavaScript. It had support for arrays, user defined functions, selfmodifying code, dynamic binding of variables, and much more. The only thing it lacked was speed.

Räkna med pengar 2006

Using VBA, integrated the stock exchange program Reuters, into a sheet in Excel which showed all your portfolio's shares, the covariance between them, current values, hedge parameters, and how to buy and sell to reach minimal risk. Everything updated in real time with data from the stock markets of the world.

C++ CGI Library & Web Site Community 2005

Set up a web server and developed a community web site where one could become member, have a presentation page, friends list, guest books, upload files, write in forums and chat with other members online. The client side part was written in HTML, CSS, and JavaScript, whilst the server side was written in C++ using a self-developed C++ CGI-library. Also developed an Internet forum for a boat club where the members had different permissions to threads (read, write, admin).

CB Skating 2005

During a project during the last year of upper secondary school, a skateboard platform game for DOS was developed in C++ and x86 assembler.

Ms Windows applications 2004

Developed Windows applications in C++. A Solitaire clone, a Calculator, and Yatzy.

68k Assembler 2003

Wrote some programs in 68k-assembler for a TI89 calculator.

Tjockemon 2000

Wrote a Pacman clone in QuickBASIC when 13 years old. The monsters had a well-working pathfinding algorithm.