

ROBERT KRAHN

SOFTWARE ENGINEER & RESEARCHER



TECHNICAL PROFICIENCIES

- Languages** JavaScript (TypeScript much preferred!), Rust, Clojure(Script), Python, C, C++, Elixir/Erlang
- Frameworks / Technologies** node.js, Electron, React, vue.js, Angular/rxjs, Reagent, Qt, Gtk, native Win32 development / C++, DirectX, OpenGL, WebRTC, AWS, Google Cloud / Firebase, etc.
- Databases** PostgreSQL, MySQL, SQLite, Neo4j, CouchDB
- Methodologies** Object-oriented programming, Functional programming, Data exploration & science, Machine learning, Open-source project management



EXPERIENCES

since February
2020

Software Engineer

CoScreen

📍 Berlin, Germany

First employee, responsible for

- System architecture and data model (Firebase and AWS cloud)
- Frontend / desktop application (Electron / vue.js)
- Native windows support (desktop capturing/streaming, custom video renderer based on DirectX11)
- Developing a data analytics platform and interactive business insight workspace (React / node.js / Rust)
- Design and development of a public REST API

February 2020

Software Consulting

Independent

📍 Berlin, Germany

- Developing parts of a new presentation software with Clojure / ClojureScript for pitch.com

April 2019

April 2019

Software Engineer

Google

📍 Mountain View, USA

- Tooling & prototyping for the Google Assistant
- Applying machine learning techniques to improve human / computer interaction.

April 2018

April 2018

Software Consulting

Independent

📍 San Francisco, USA

- Front-end development for Y Combinator startups.

Oct 2017

Oct 2017

Senior Researcher

Y Combinator Research

📍 San Francisco, USA

- Designed and implemented the lively.next personal programming environment that is now an open source framework and used by startups for application prototyping and as a user interface library. lively-next.org

May 2016

May 2016

Senior Developer And Researcher

Communications Design Group, SAP

📍 Palo Alto, USA

- Research and development of programming tools supporting program comprehension and debugging.
- From scratch implementation of an IDE for the Clojure programming language (cloxp) that facilitates live programming and innovative debugging techniques.

Jul 2012

Jun 2012

Software Engineer

Zendesk

📍 Copenhagen, Denmark

- Design and implementation of a modular JavaScript front-end architecture for help desk applications with a Ruby-on-Rails backend. Special emphasis on extensibility and customizability by end-users.

Oct 2011

Sep 2011

Research Assistant, Ph.D. Candidate

Software Architecture Group, Hasso Plattner Institute

📍 Potsdam, Germany

- Industry cooperation: Created a web-based development platform for prototyping and rapid development in cooperation with the SAP Palo Alto Research Center. My work contributed to the SAP OpenUI5 project.
- Research and teaching, software development tooling, context-oriented programming, and modularity.

Oct 2010

Mar 2009

Software Engineering Internship

Sun Microsystems Laboratories

📍 Menlo Park, USA

- Implemented a programmable wiki in the Sun Labs Lively Kernel for collaborative online app development.

Aug 2008



EDUCATION

2010

M.Sc., IT Systems Engineering

Hasso Plattner Institute, University of Potsdam

📍 Potsdam, Germany

- M.Sc. Thesis: Lively Wiki - A Development Environment for Creating and Sharing Rich Web Content
- B.Sc. Thesis: Mapping Semantic Units between Squeak and Subversion

2005

CONTACT INFO

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🐙 github.com/rksm

🐦 twitter.com/robertkrahn

PORTFOLIO AND PUBLICATIONS

A list of my past projects, research publications, and talks can be found at

<https://robert.kra.hn>.

The source code of this document can be found at git.io/vNpB8.