

Christian Bai

Senior Software Engineer

SUMMARY

- Full-stack developer with more than 15 years of experience in developing web applications and client-server applications dedicated to producing quality work.
- More than 10 years of experience in managing technical projects in information and web security, voice, video and data storage.
- Communicates in English and German equally, loves to work in teams, works accurately and focused.
- This resume is available at <https://techrez.io/resume/christian-bai>

WORK EXPERIENCE

Senior Software Engineer

Jan 2026 - Present

Information Technology and Services

Professional Software Engineer

Jan 2022 - Dec 2025

Information Technology and Services

Senior Software Developer - CTO and Owner

Mar 2019 - Dec 2021

Information Security and Web Application

- Develop, maintain and operate a 200+ users web application "Passfindr" allowing to securely manage sensitive (client side encrypted) information like web account credentials and credit card numbers. (JavaScript, HTML, CSS, SCSS, jQuery, Bootstrap, PHP, SQL, MariaDB, Apache, PKI, Linux, bash, Git, Gulp, Responsive, Mobile First, Web Application, Information Security, Full Stack)
- Designed and developed a client-side JavaScript framework providing web applications the foundation for scalability, modularity and event-driven design. (JavaScript, Event Driven, Web Application)
- Migrated the web application Passfindr from jQuery/UI to Bootstrap 5. (jQuery, Bootstrap)
- Redesigned Passfindr to a fully event driven, highly modular and scalable web application. (JavaScript, Event Driven, Web Application)

Software Engineer

May 2014 - Apr 2017

Information Security

Software Development

- Developed software for the company's product Secure Entry Server Web Application Firewall (WAF), covering conceptual design, implementation, testing, documentation and release management under Linux helping to reach 1000+ firewall installations. (Forward Reverse Proxy, WAF, Linux, bash, Python, Apache, Nginx, C, C++, Java, Git, Gitlab, Kanban, Puppet, Jenkins, Elasticsearch, Kibana, Logstash, Web Application, Information Security, Full Stack)

DevOps

- Played active role in management and support of the product for the Secure Entry Server Web Application Firewall product family. (Linux, Apache, bash, Python)

Support and Administration

- Introduced Scrumban. (Kanban, Consulting)
- Enhanced the quality and feature set of the company's product.

Full Stack Developer

Feb 2012 - Apr 2014

Passfindr

- Migrated and further developed an existing web application (Passfindr) from Perl/CGI to jQuery, PHP and MySQL data backend storage. (Perl, jQuery, PHP, MySQL, SQL, Full Stack, Web Application, Information Security)

Senior Infrastructure Architect

Feb 1999 - Sep 2011

Financial Services

DevOps

- Implemented company wide telecommunications and media services in the capacity as a technical project manager: Web-Gateway (Forward Proxy/Caching and Content Filtering), Contact Center, traditional telephony and Voice over IP services, Corporate voice mail, Gateway for text messages (mobile telephony), Voice over IP telephony, global video conferencing and live and on demand video streaming. (Forward Reverse Proxy, Caching, CTI, VoIP, VoD, Video Conferencing, Video Streaming, SIP, H323, Linux, bash, Perl, Project Managing)
- Implemented and operated the Worldwide Secure Web Gateway for Swiss Re's 10.000+ employees. (Forward Reverse Proxy, Caching, ICAP, HTTPS, Linux, bash, PKI, TCP IP, Project Managing, Educating, Information Security)
- Implemented and operated a 200+ seat VoIP based Contact Center Platform serving the company's headquarter shared services contact centers. (CTI, VoIP, SIP, H323, Project Managing)

Software Development

- Implemented and maintained 5+ database applications in the capacity as an overall project manager and software developer. (ERD, Oracle, SQL, HTML, CSS, JavaScript, Perl, bash, Project Managing, Web Application)

Educator

- Managed an IT/system technician as part of a training for one and a half years. (Educating)

Technical Management

- Promoted to a Member of the Technical Management in April 2001.

Software Developer

Dec 1995 - Jan 1999

Telecommunications and Information Services

Software Design and Development

- Developed software for the company's product covering the conceptual design, implementation, testing, documentation and training of the client server application in a TCP/IP and X.25 networked environment based on UNIX, X11 Windows and SQL RDBMS. (C, Java, TCP IP, X25, Unix, Solaris, X11, SQL, Sybase, Full Stack)

DevOps

- Assist on-site technicians with application installation and configuration.

Admin and Consulting

- Implemented and introduced source code configuration, revision control management tools. (CVS, Project Managing, Administrating, Educating)
- Implemented and introduced the Intranet for the company. (HTML, CSS, Apache, Educating)

Software Developer

Jan 1994 - Aug 1995

Machine Tool Industry

Software Design and Development

- Analyzed the demands of a software to control a CNC machine using CASE tools. (CASE, C)
- Designed, developed and tested the software systems services. (CASE, C, Realtime OS)
- Designed, developed and tested the CNC-kernel resources manager. (CASE, C, Realtime OS)

Consulting

- Acted as a consultant in questions concerning analysis, design and programming techniques. (CASE, Consulting)
- Introduced source code configuration and revision management tools and trained staff. (CVS, Educating, Administrating)

Software Developer

Nov 1989 - Dec 1993

Textile Machinery Industry

Back-end Development

- Designed, developed and tested the software systems core spinning processes, the doffer (yarn transport), the drive resources management, the exception handling, the embedded tiny file system to storage the machines configuration. (C, Realtime OS, CASE)
- Designed and developed a test environment for automatic testing of the control systems. (C, Pascal, Realtime OS)

Software Design and Development

- Cooperation in the project analysis and conceptual design to integrate a robot into an existing control-software of a ring spinning machine. (C, CASE)
- Analysis and design of the control-software using CASE-tools, coding, testing and delivering for production. (CASE, C, CVS)
- To familiarize in an existing control-software for the yarn transport system of a ring spinning machine for enhancement of functionality. Patenting of the yarn transport control algorithm. (CASE, C)
- Cooperation in the analysis of the demands on a software to control a fully automated ring spinning machine using CASE-tools. (CASE)
- Conceptual design of the software systems services. (CASE)
- Conceptual design and development of a multitasking kernel to manage the machines drive units. (CASE, C)

DevOps

- Field tested the yarn transport system in a spinning mill, release of the software for production.

- Testing and introduction of the control system in a spinning mill.
- Further improvement of the control system to be ready for production.

Deputy Project Manager

- Determined and supervised the programming standards of the team.
- Introduced the configuration management for the produced source code and trained the team members. (RCS, CVS, Educating)

EDUCATION

English Conversation	Feb 2017 - Feb 2019
Berlitz	
Spanish Language	Oct 2011 - Jan 2012
Academia Buenos Aires	
B.S. in Electrical Engineering	Oct 1987 - Oct 1989
ZHAW Zurich University of Applied Sciences - Switzerland	
Graduated in Remote control and Steering systems	
B.S. in Mechanical Engineering	Oct 1984 - Oct 1987
ZHAW Zurich University of Applied Sciences - Switzerland	
Graduated in Energy and Process Engineering	
Diploma	Oct 1981 - Oct 1984
Vocational High School - Winterthur, Switzerland	
Graduated as Mechanical Engineer	
Diploma	Oct 1980 - Oct 1984
Metallarbeiterschule Winterthur, Switzerland	
Graduated as Mechanical Engineer	