Marco Von Ballmoos

Software Architect & Developer

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https://earthli.com

Profile

I have more than two decades of experience as a professional software developer, systems architect and technical project manager. I'm interested in high-quality solutions to tough problems. I co-founded Encodo Systems AG almost a dozen years ago.

My focus has always been on generalization and DRY using metadata and common libraries. I've written four frameworks over the years, in C#, C++, Delphi and PHP.

Skills

Systems Architect

Design back-end and front-systems. Integration with existing systems. Maintainable. Extendable. Understandable.

Full Stack Developer

Comfortable and experienced in writing high-performance, readable code in various languages and with various frameworks, libraries and technologies.

Technical Project Manager

Collect and create requirements. Manage issues and releases.

Trainer & Educator

Plan and execute trainings for small- to medium-sized teams. Write technical documentation and share knowledge via code reviews and frequent blogging.

Employment & Education

Encodo Systems AG

Winterthur, Switzerland

Sep 2005—present

Founding Partner, Technical Project Manager, Architect, Lead Developer, Support

Opus Software AG

Wetzikon, Switzerland

Oct 2002—Aug 2005

Architect, Lead Developer, Support

Logicat, Inc.

New York, New York

Hamilton College

Clinton, New York

Aug 1994—Aug 2002
Architect, Lead Developer

Aug 1990—May 1994
Bachelor of Arts in Mathematics (minor in physics; undeclared major in computer science)

Personal

Languages

English, German: fluent (speaking, reading, writing)

Interests

Cycling, Hiking, Programming, Writing, Books, Movies

Project History

Encodo Systems AG

September 2005—present

Our goal at Encodo is to build interesting and useful software. I've worked on many projects with a wide range of technologies and target platforms. Our emphasis is on using the best, most appropriate tools for the job.

Quino

Sep 2007—present
Technical PM, Architect, Lead Developer

C#, Winforms, WPF, Web API, TypeScript, Less, React

A metadata-centric framework to develop client and service applications. Includes an ORM, automated schema-migration, generated user interfaces and much more.

Alps Handoff Training

Oct 2015
Architect

C#, Quino, Web API, TypeScript, Less, Knockout

Created presentations and tutorials and presented a 5-day training to onboard a small team.

Alps

Jun 2013—present
Technical PM, Architect, Developer

C#, Quino, Web API, TypeScript, Less, Knockout

Qontis

Mar 2013—Sep 2014
Architect, Developer

C#, WCF, Meniga, JavaScript, Less, jQuery

Services and web front-end for processing, overview and management of ACATS for Apex Clearing Corporation.

A personal finance manager with integration into various online banking systems.

Crealogix MUX Training

Aug 2014

Architect

HTML 5, JavaScript, Less/Css

Created a framework recommendation for a web-based project. Created presentations and tutorials and presented a 5-day training to onboard a small team.

Roche HTML5 Training

Nov 2013

Architect

HTML 5, JavaScript, Less/Css

Created presentations and tutorials and presented a 3-day, HTML5 introduction and training with a focus on architecture.

Roche MUA

Oct 2012—Jun 2013

Developer

HTML 5, JavaScript, Less/Css

A full-fledged port of a Silverlight user-assistance application to HTML for mobile devices.

Peak6 Launchpad

Jul 2010—Sep 2012

Architect, Developer

C#, Winforms, Quino

A highly concurrent and high-performance query and display client for options traders.

M9

Mar 2013—Sep 2014

Architect, Developer

C#, Winforms, Entity Framework

A large-scale and high-volume contact bulk mail/campaign manager.

eZag Admin

Mar 2007—present

Architect, Developer, Support

C#, Winforms, Quino, ASP.Net, Exchange integration

A product for managing a school, including basic data, curriculum and lesson planning software.

POC Raiffeisen

May 2007—Aug 2007

Fides Client

Jun 2006—Jun 2014

Architect, Developer

Java, Eclipse RCP

A POC to wrap legacy software in a SOAP API with a Java client prototype.

Architect, Developer, Support

Delphi Pascal, VCL

A client/server component to communicate in parallel and asynchronously via a custom, secure XML-based protocol.

Fides Reporting

Jun 2006—Jun 2014

Architect, Lead Developer, Support

Delphi Pascal, VCL

A reporting engine and full-fledged designer for fixed-width text, HTML and PDF reports.

ZAG Entlastungkontrolle

Oct 2005—Oct 2014

Architect, Developer, Support

Java, Tapestry

A product for teachers and administrators to manage compensated and continuing eductation time.

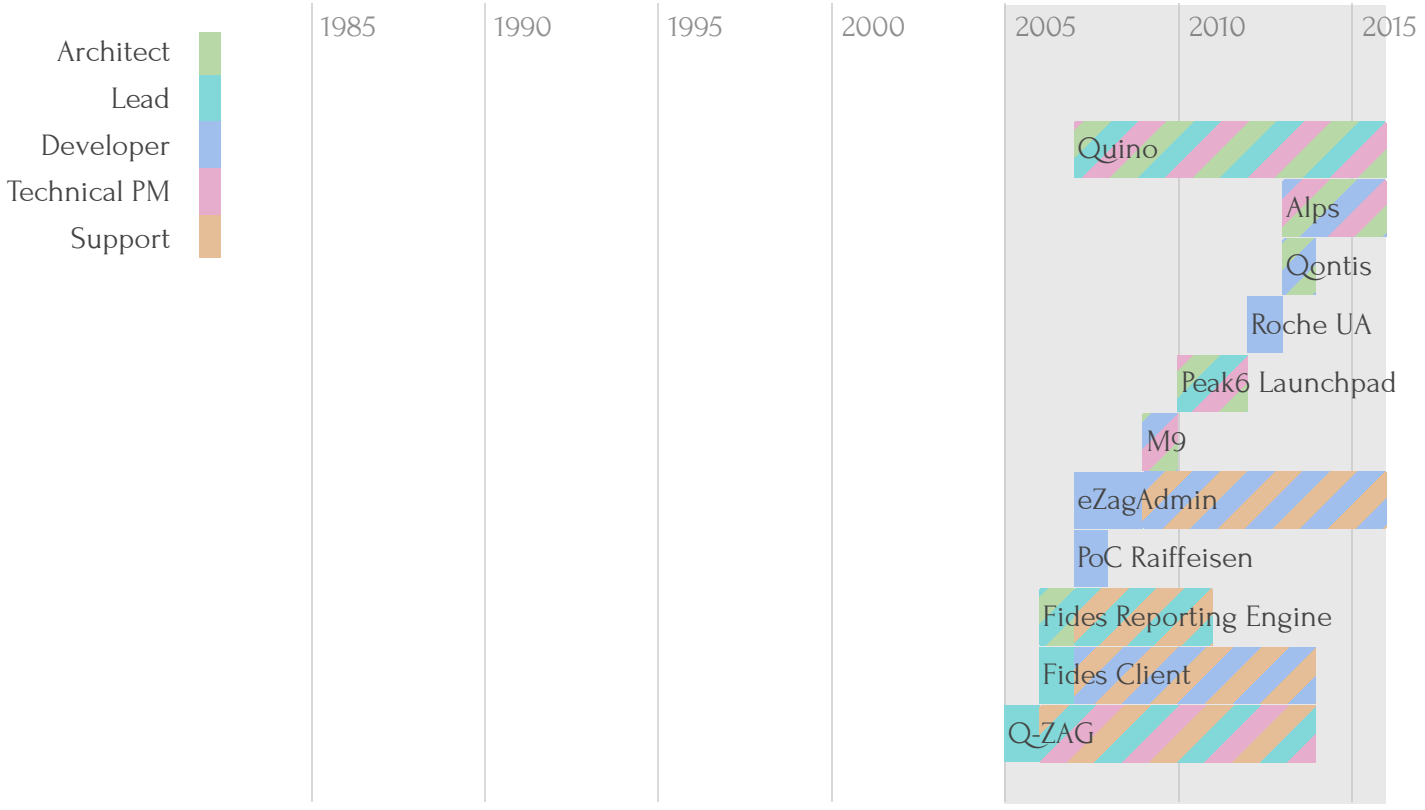
Q-ZAG

Dec 2005—Oct 2014

Architect, Developer, Support

Java, Tapestry

A document management system for organizing materials related to the Quintessenz system.



Entlastungskontrolle

Opus Software GmbH

October 2002—August 2005

I moved from New York City to Switzerland to work for Opus, where I went back to working with Object Pascal and Delphi.

Atlas

Oct 2002—Aug 2005

Architect, Lead Developer

Delphi Pascal, VCL

A metadata-centric framework to develop client and service applications. Included an ORM, automated schema-migration, generated user interfaces and much more.

SQL Server Data Driver

Jan 2005—Aug 2005

Lead Developer

Delphi Pascal, SQL Server 2000

A data driver for Atlas for SQL Server databases.

Allbase Data Driver

Jun 2004—Dec 2004

Lead Developer

Delphi Pascal, HP Allbase

A data driver for Atlas for HP Allbase databases.

Dialba 2000

Jun 2003—Aug 2005

Developer

Delphi Pascal, VCL, Btrieve/Powerflex

Support and enhancements for a feature-rich and powerful banking front-end written with Atlas.

Atlas Startup

Feb 2003—Jun 2003

Lead Developer

Delphi Pascal

A flexible and declarative configuration and startup system for Atlas applications.

Atlas Logging

Apr 2003—Jun 2003

Lead Developer

Delphi Pascal

Add configurable and semantic/information-rich logging for Atlas applications.

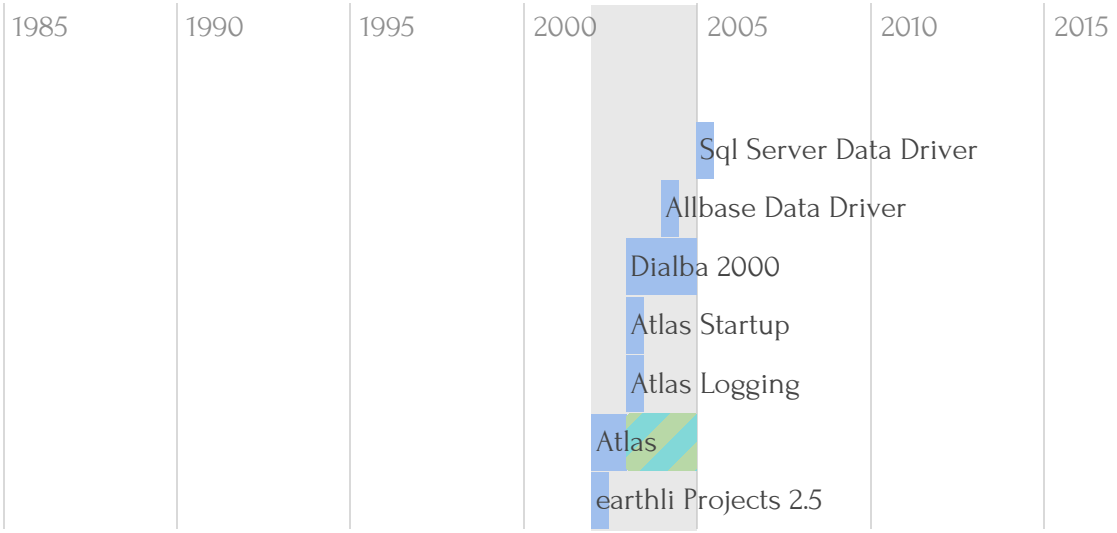
earthli Projects 2.5

Nov 2002—Jan 2003

Lead Developer

PHP 4

Install and support earthli Projects as issue-tracker for Opus. Improve emails and subscriptions. Enrich job/issue data with multiple branch statuses.



Logicat, Inc.

August 1994—August 2002

I moved from upstate New York to New York City to start my professional career at Logicat as a developer.

Logicat Course Administrator

May 2002—Aug 2002

Project Manager, Architect, Lead Developer

Visual Basic, ASP.Net, IIS 5, SQL Server 2000

Added multi-tenancy to CE Manager with features/permissions per customer and improved evaluation, reporting and views.

Logicat CE Manager

Apr 2001—Apr 2002

Project Manager, Architect, Lead Developer

Visual Basic, ASP.Net, IIS 5, SQL Server 2000

A web-based application with reports, reminders and statements for lawyers to track and manage continuing-education credits and licenses.

Logicat Online Testing

One-on-One with the SAT 2

Feb 2001—Apr 2001

Lead Developer

Visual C++ 6, IIS 5, SQL Server 2000, HTML/CSS/JS

An HTML-based testing platform for online learning solutions.

Jan 1999—Feb 2001

Project Manager, Architect, Lead Developer

Visual C++ 6, MFC, Win32, Metrowerks CodeWarrior 5, Macintosh Toolbox

Add full cross-platform support for Mac OS 9/Windows 95/98 for the Logicat Test Engine (including full renderer and file-format abstraction). Authors had significant scripting/formatting/layouting control.

Logicat Test Engine

Nov 1997—Dec 1998

Project Manager, Architect, Lead Developer

Visual C++ 6, MFC, Win32

Extended ELF with sounds, images, videos, forms and event-based scripting to build a feature-rich and powerful testing framework. Initial content was for a BNL (Brookhaven National Labs) training manual.

Logicat CPA Review Software Live Courses

May 1997—Nov 1997

Architect, Lead Developer

Visual C++ 5, MFC, Win32, Delphi 3, OLE/COM

Integrate study plan, calendar and PowerPoint presentations to support/enhance live instruction.

Performance Transfer Utility

Feb 1997—Apr 1997

Lead Developer

Delphi 2.0, Wise 5.0, HTML/CSS

A hardware copy-protection utility for Logicat CPA Review with custom installer and detailed (100-page) manual.

Logicat CPA Review

Aug 1996—Jan 1997

Architect, Lead Developer

Visual C++ 4.1/5, MFC, Win32, ELF

A rewrite of the popular PassMaster DOS program for Windows 95 using ELF.

ELF (Extended Logicat Format)

Feb 1996—Aug 1996

Architect, Lead Developer

PassMaster CPA Review Web Site

Dec 1995—Jan 1996

Borland Delphi 2, Microsoft Visual C++ 4.1

A content pipeline and rendering library that included a markup language, RTF parser and structured binary document format/database.

Lead Developer

JavaScript, HTML, Delphi

An online demonstration of some of the functionality of the DOS-based PassMaster CPA review software.

One-on-One with the SAT Counselor Utility

Sep 1995—Nov 1995

Lead Developer

Borland Object Pascal 7, Win32

A management and reporting utility for multi-user, networked school distributions of One-on-One with the SAT.

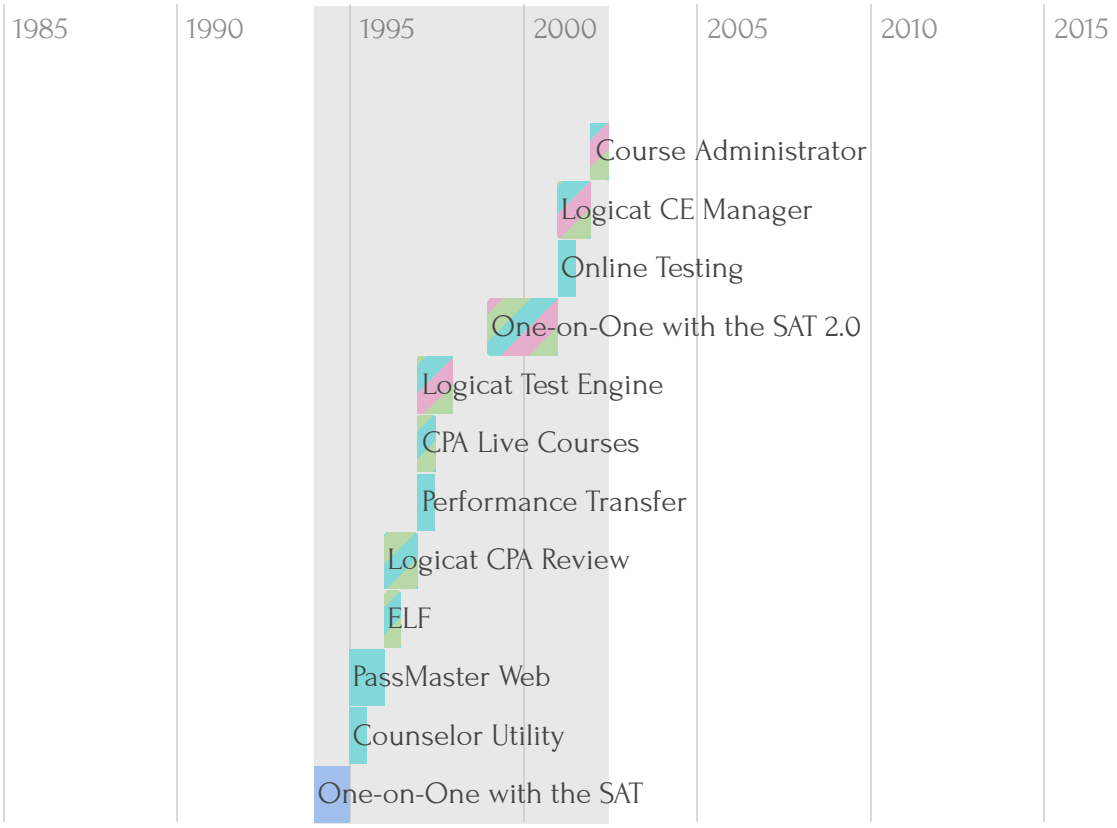
One-on-One with the SAT

Aug 1994—Sep 1995

Developer

Borland Object Pascal 7, Win32

The official College Board SAT-preparation tool for Windows 3.1/95.



Personal Projects

January 1998—present

I built and continue to maintain all of the software to run my web site. I've also started and participated in open-source projects over the years.

earthli WebCore 3.x

Aug 2002—present

Project Manager, Architect, Lead Developer

PHP 5, MySQL, HTML5, LESS/ CSS, JS

Continued maintenance (migrated to PHP5) as well as introducing features (newsfeeds/social optimization).

TuneSync

Dec 2004—Dec 2005

Project Manager, Architect, Lead Developer

Delphi 7

An application for comparing and syncing iTunes libraries (ID3 tags, ratings, play counts, etc.).

PHPDocumentor

Apr 2003—Dec 2010

Developer

PHP 4/5

A documentation generator for PHP. Enhanced data and templates (HTML4/CSS valid) and fixed bugs.

earthli WebCore 2

Apr 2002—Aug 2002

Architect, Lead Developer

PHP, MySQL 4

A refactoring of the framework to centralize common logic. Migration of all applications.

earthli Projects

Mar 2002—Jul 2002

Lead Developer

PHP, MySQL, WebCore

An issue-tracker and version/release manager built with the earthli WebCore.

earthli News

Jan 2002—Feb 2002

Lead Developer

PHP, MySQL, WebCore

A blogging platform built with the earthli WebCore (replaced Forums).

earthli Recipes

Jan 2002—Feb 2002

Lead Developer

PHP, MySQL, WebCore

A recipe-management application built with the earthli WebCore.

earthli WebCore

Oct 2001—Dec 2001

Architect, Lead Developer

PHP, MySQL, HTML, CSS, JS

Built a web-application framework with themes, security, search, an ORM,

an email publication engine and more. Rebuilt Albums with this framework.

earthli Themes

Jun 2001—Sep 2001

Lead Developer

HTML, CSS

Rewrote web front-end with CSS to support multiple color schemes.

earthli Forums

Oct 2000—Dec 2000

Architect, Lead Developer

PHP, MySQL, HTML, CSS, JS

Bulletin board with full-text search, nested commenting and ACL-based permissions.

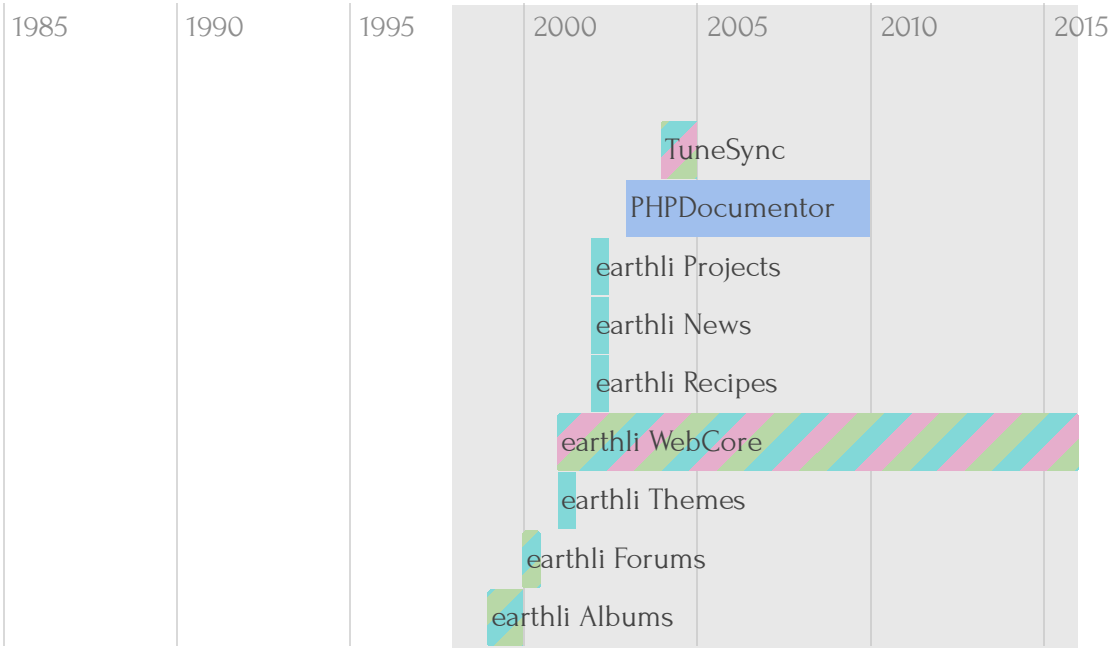
earthli Albums

Oct 1999—Jul 2000

Architect, Lead Developer

PHP, MySQL, HTML, CSS, JS

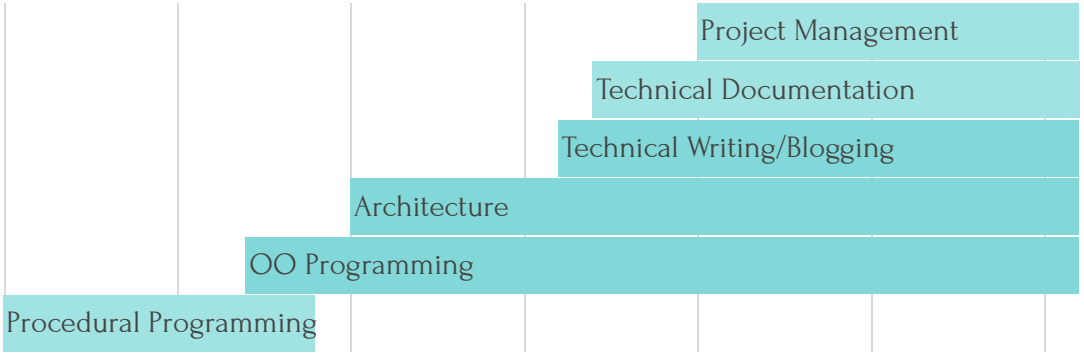
Albums with journal entries, photos, a calendar and support for multiple users.



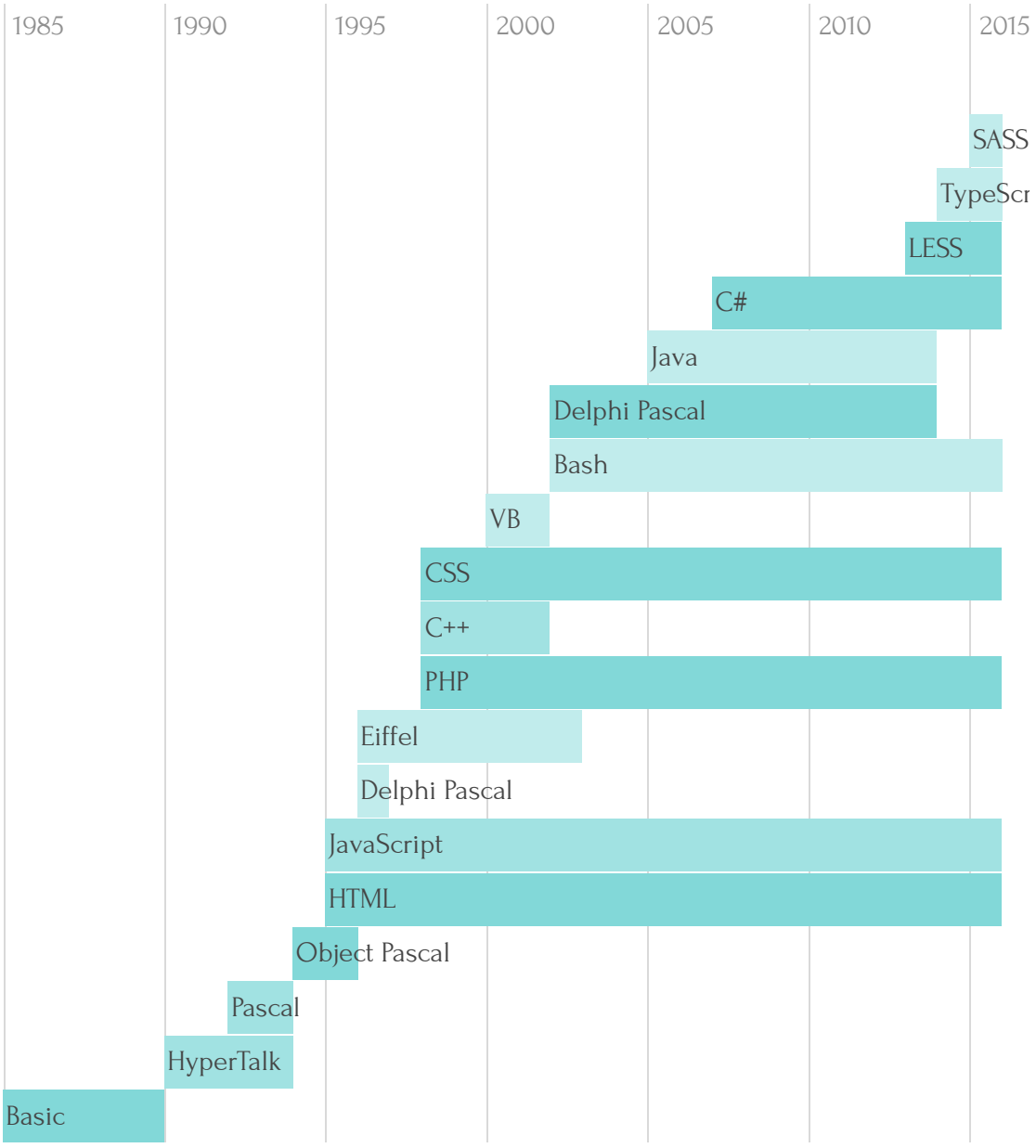
Skills History

Expert
Proficient
Competent

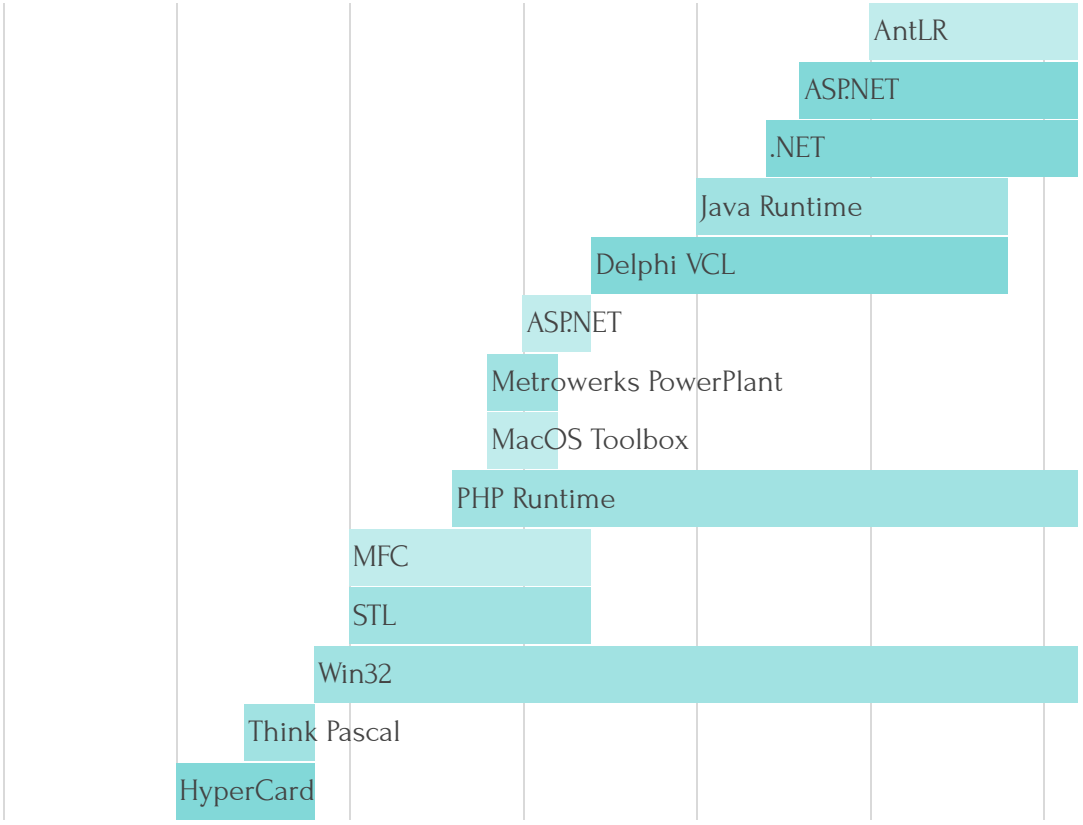
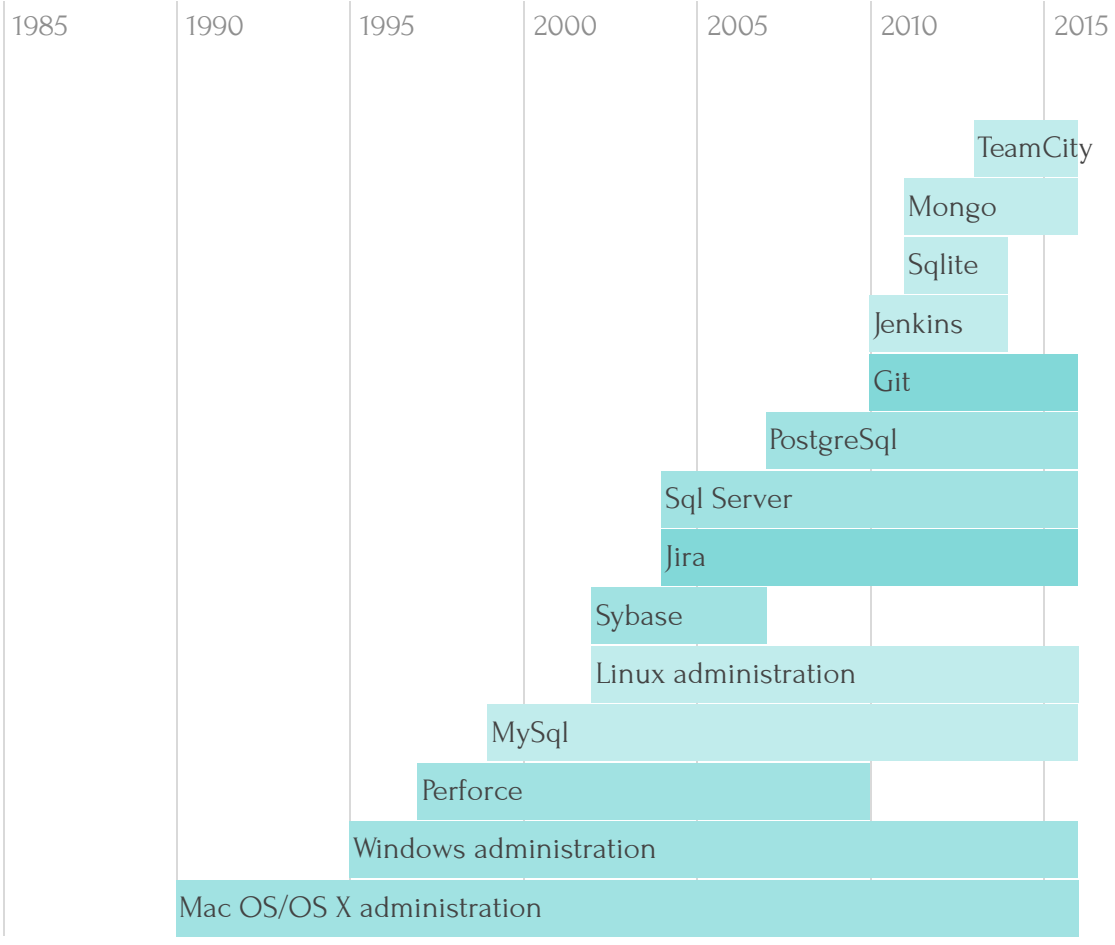
Techniques



Languages



Libraries & Frameworks



Administration & Tools