

At a glance – skills & expertise:

Primarily utilised languages / technologies / stacks / frameworks:

- From 2011 onwards *frequently*: **Go**; Haskell / PureScript sporadically since 2016
- TypeScript since 2015; Node.js & CoffeeScript since 2011 (sporadically)
- HTML/JS/CSS since 1999; SQL / XML since 2000
- C#, ASP.NET from 2002 – 2015; F#, Lisp & Python rarely but since ~2008

Generalist / soft skills:

- Paradigms: purely-functional, service-oriented, object-oriented, domain-specific
- *Solid grasp of the essentials* of i.a. TCP/UDP, HTTP, REST/JSON/RPC, RDBMS, NoSQL, GPGPU, concurrency, parallelism, low-level realtime performance, SOA and so-called „micro service“ architectures, current SPA frontend tech (i.a. React, Vue.js, MVC, FRP), event sourcing, message queuing, map reduce, cloud / ops tech such as Docker / Kubernetes etc.
- Best-practice habits for maintainable, long-lived, correct, performant, documented code bases (pure functions, referential transparency, minimal shared mutable global state, ..)
- Rapid adoption of whatever project organisation, documentation, collaboration and communication methodologies are current on my clients' side; as well of client- / project-specific APIs, libraries, architectures, tool chains and coding standards

More complete list of actively used (for some time) languages / tech, chronologically:

- Since 1998: Basic, Pascal; since 1999: HTML, VisualBasic
- Since 2000: ASP, SQL, CSS, JavaScript; since 2001: PHP, Java, XML
- Since 2002: .NET Framework, C#; since 2003: ASP.NET, XSL-T, XPath
- Since 2004: Prolog, SQL Server, XSD Schema
- Since 2006: SharePoint (as an API-and-web-app-development-and-deployment platform)
- Since 2008: Lisp, Python, F#
- Since 2011: **Go**, WebGL, Node.js, various short-lived JavaScript frameworks
- Since 2012: OpenGL, GLSL
- Since late 2015: **Haskell** and related ML-like languages (F#, PureScript..)

Projects & work history 2000 – today:

2017 **Private product development, mobile-first SaaS app suite for small businesses:**

Backend: Go („almost-micro service architecture“) with gRPC & PostgreSQL;
frontend: PureScript and (originally React, but now) Vue.js, plus React Native

Open-source projects, in more detail at github.com/metaleap:

I.a. a RabbitMQ high-level library in Go (based on existing lower-level bindings);
code-assistance plugin for VScode in TypeScript & Node.js (+ backend Go service)

2016 **Sabbatical year; some open-source output; mostly private study & practice of:**

purely-functional programming with non-strict semantics & higher-kinded types, and
invested time in a more solid grasp on current research efforts (dependent types & refinement types)
of those prolific language theorists that devised *decades earlier* the bulk of the very „innovations“
today’s mainstream languages such as C#, Java, EcmaScript, Python etc. gained in recent years (eg.
LINQ & alike DSLs, generics, anonymous functions / lambda abstractions, nullables / option types,
tuple types, destructuring, pattern matching, „expression-bodied methods“ / „arrow functions“, etc..)

2015 **SharePoint-Tools.NET & roxority.com: my own**

2014 **software business (online operation from abroad)**



2013 • After 2015 transfer to new maintainer, in 2017 the

2012 original domains are sadly **no longer live**; archived at: roxority.squarespace.com

2011 • C# full-stack development (plus documentation, bilingual localisation, marketing, distribution and tech support; furthermore in-depth on-topic blogging, power-user community / forum, and bilingual website design / content / maintenance) for my 5 different SharePoint Server component software products, each fully supporting the then-major 3 server versions 2007, 2010, 2013:

1. **ExportZen:** enabling automatable, workflow-capable, schedulable, reusable deployable, multiformat-capable SharePoint List/Library/Calendar exports
2. **FilterZen:** then the most-powerful & -tweakable search&filter component
3. **UploadZen:** user-friendly, plugin-agnostic-yet-cross-browser (back then real challenges in SharePoint & all web apps) bulk uploads with scalable back-end
4. **PeopleZen:** richly customisable, reusable deployable User Profile listings, views und WebParts (ie. widgets)

5. **PrintZen:** print-friendly document library, calendar and list views

- All products could be easily self-translated by the power user / admin
- All products featured a user-friendly „configuration studio“ page (no .json or .cfg)
- Technologies: i.a. C# .NET, SharePoint 2007/2010/2013, ASP.NET, HTML/CSS/jQuery, XML, SQL, CAML; REST-of-sorts to the SharePoint Server

2011+ [Full-stack] **Dozens of Open Source projects of varying scope in Go & others**

Complete overview of all repositories: <http://tinyurl.com/phil-opensource> – incl. various „in actual real-world use“ packages in **Go**, powerful site generator in Haskell

2010 [Front-end] **VEMAG (Verden)**



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme

2010 [Full-stack] **VisitingAngels (Bellingham, USA)**



C# development of a server-side, remote-invokable bulk printing solution (incl. duplex/stapling/etc. capabilities) for SharePoint Server

2010 [Front-end] **German Quality Association (Frankfurt)**



Faithfully-true-to-detail, robustly integrating (as per Enterprise requirements) corporate-design adaptation as a custom SharePoint Theme

2010 [Full-stack] **PortalSystems Consulting (Potsdam)**



C# development of a more versatile and more richly customizable, fully compatible drop-in replacement-alternative implementation of SharePoint's built-in "Lookup field" (field linking items in one data source to other items in the same or another) as a readily installable SharePoint Server component

2010 [Front-end] **Servier (München)**



Faithfully-true-to-detail, robustly integrating (as per Enterprise requirements) corporate-design adaptation as a custom SharePoint Theme

2010 [Full-stack] Exerti (Itegem, Belgien)



Bespoke SharePoint *Business Data Catalog* WebPart development in C#

2010 [Full-stack] SentiTrade (Berlin)



C# development of a „seamless SharePoint integration“ (essentially *the* user-facing front-end GUI) for „GreenBox“, SentiTrade’s largely API-only, in-flight / evolving linguistics/ML-driven proprietary Sentiment Analysis suite

2009 [Consulting / Full-stack] Data Centre Mecklenburg (Schwerin)



SharePoint migration consulting: on-site workshop and instructive bespoke C# development to automate parts of the migration effort

2009 [Full-stack / Coaching] K.D. Feddersen (Hamburg)



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme; on-site workshop on SharePoint Server development with C# & ASP.NET

2009 [Front-end] Bauer Systems (Hamburg)



SYSTEMS KG

Faithfully-true-to-detail, robustly integrating (as per the usual needs) corporate-design adaptation as a custom SharePoint Theme

2009 [Full-stack] Swisscom IT Services (Zürich, CH)



C# development of bespoke custom SharePoint Server components (WebParts, MS BDC import/export, custom field type)

2009 [Full-stack / Coaching] PortalSystems Consulting (Potsdam)



- C# development of a bespoke, PSC-specific time-tracking and project-management solution in SharePoint Server with Dynamics CRM integration
- On-site intensive crash courses for fresh entry-level hires: SharePoint development practices, principles & techniques for C# & ASP.NET programmers
- On-site full-day workshop: employing XPath & XSLT for manifold purposes and

diverse biz-data use-cases: in SharePoint specifically, and in .NET code generally

2008 [Front-end] **Sysmex (Norderstedt)**



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme

2008 [Coaching] **Salis IT Services (Cairo, Egypt)**



Devised & conducted a week-long intensive on-site course with hands-on coaching for Salis' ASP.NET and C# developers on all facets of SharePoint development: programming, installing, deploying, trouble-shooting custom server-side back-end code, the various built-in APIs, techniques for robust front-end, etc.

2008 [Refactoring] **Deutsche Post / DHL IT Services (Fulda)**



“Collaboration Consolidation Programme and Business Change Management”: on-site consulting and collaboration on architecture, technology choices, project management of varying concurrent cross-enterprise migration projects of previously isolated, partially redundant, verging-on-monolithic „silo“ solutions towards their emerging central enterprise-wide SharePoint 2007-based collaboration platform

2008 [Back-end] **Homag (Schopfloch)**



C# development of a richly configurable, fully parallelised, customer-specific bulk data import and transformation tool-chain in the context of a sweeping longer-term legacy-DMS-to-SharePoint migration effort

2008 [Coaching / Full-stack] **Rotes Kreuz (Baden-Baden)** DRK-Blutspendedienst
Baden-Württemberg - Hessen



On-site consulting, prototyping, C# development and server customizations to help realise a nationwide corporate collaboration (SharePoint) intranet environment

2008 [Coaching] **Göde Wissenschaftsstiftung (Aschaffenburg)**



On-site SharePoint coaching: C# development, server customizations & migration

2007 [Front-end] **Philips Lighting (Aachen)**



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme

2007 [Coaching] Göde Wissenschaftsstiftung (Aschaffenburg)



On-site workshop: SharePoint intranet migration MS SPS 2003 to MS WSS 2007

2007 [Front-end] Coler (Münster)



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme

2007 [Back-end / API interop] d.velop AG (Gescher)



Bespoke development efforts for d.velop's *SharePoint Platform Services* initiative:

- Prototyping and C# co-development of the first iteration of their „d.velop *SharePoint ECM Services*“ Document Management suite of products,
- seamlessly integrating d.velop's widely deployed „d.3“ document lifecycle and archival tech stack with SharePoint core technologies such as *Enterprise Search*, distributed Document Libraries, Records Center and WebParts

2007 [Front-end] Big Dutchman (Vechta)



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme

2007 [Coaching + Front-end] Solarlux (Osnabrück)



On-site workshop: SharePoint design customization practices & techniques, plus live-demo-coding of a faithfully-true-to-detail, robustly integrating (as per the usual Enterprise needs) corporate-design adaptation as a custom SharePoint Theme

2007 [Front-end] BP (Lingen)



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme

2007 [Front-end] Axel Springer (Berlin)



On-site web development during the final spurt of their extensive „XML-based, standards-driven Web 2.0“ (2007-era buzzwords) relaunch of mass portal *Bild.de*

2007 [Full-stack] **dSPACE (Paderborn)**



- C# development of an HR Candidate Management System installable/embeddable within SharePoint Server, featuring seamless interop with out-of-box / 3rd-party WebParts (ie. widgets) and the MS *Business Data Catalog*
- Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc) corporate-design adaptation as a custom SharePoint Theme

2007 [Coaching] **Gildemeister-Seidensticker (Bielefeld)**



On-site workshop on SharePoint Server & Enterprise Search: installation, administration, customization

2007 [Front-end] **Sony Europe (Berlin)**



Faithfully-true-to-detail, robustly integrating (with built-in GUIs and diverse kinds of client devices etc.) corporate-design adaptation as a custom SharePoint Theme

2006 [Full-stack] **ArcelorMittal (Eisenhüttenstadt)**



C# development (plus documentation, installation etc) of a tailor-made ASP.NET-based Media & Loans Management Systems for Arcelor's in-house Technical Library

2006 [Full-stack] **Masters Wines (New York City, USA)**



ASP.NET-based Business Intelligence real-time dashboards featuring (slightly for 2006) charts, KPIs, reporting and flexibly composable data aggregators

2006 [Native-client] **Shareware development: Quotator (tinyurl.com/quotator-net)**

C# development (plus end-user documentation, localisation, marketing, distribution and tech support) of a fairly popular Windows app for 5 major Windows-based Email apps to automatically embed per each new message a randomly chosen dynamic signature from a custom collection of quotes or other slogans

2005 [Native-client] Shareware development: **SuDoku Pro** (tinyurl.com/sudoku-pro)

C# development (plus end-user documentation, localisation, marketing, distribution and tech support) of a fairly popular Windows app for solving (programmatically generated or manually entered eg. from newspapers) Sudoku puzzles, featuring solving assistance, instant solving, printing of one or multiple generated Sudoku puzzles, including pen-ready mobile version (.NET Micro Framework) for the „MS Pocket PC“ OS (aka. Windows CE)

2005 [Full-stack] **West Midlands CCM (Coventry, UK)**



On-site .NET consulting und co-development of an ASP.NET-based „intelligent supply chain visibility management portal solution“ (Midlands University project..) for the „West Midlands Collaborative Commerce Marketplace“ (Chamber of Commerce project..) member companies

2004 [Full-stack] **Insurance&more (Berlin)**



Architecture & MVP prototype development of an ASP.NET-based, pan-European insurance industry web community hub (didn't take off)

2003 [Full-stack] **Seminar for Advanced English Studies (Oxford, UK)**



Web site design & development *saes.info* (my version was live until early 2011) plus development of custom, user-friendly Content Management System with basic CRM capabilities, tailored to the needs of SAES, in ASP.NET with C#

2002 [API interop] **Adhaero Technologies (Hemel Hampstead, UK)**



Software localisation & tech consulting (VS 6; LDAP + MS Office interop via COM / ActiveX) for the German market entry of up-start *Adhaero Doc* (later acquired by *Avoco Secure*), developer of „peer-to-peer Enterprise Document Rights Management“ (ie. distributed doc-level ACLs)

2001 [Full-stack] **ASSA-ABLOY / BAB-IKON (Potsdam)**



2000 Design, architecture, development (ASP 3.0 / VBScript) of a web-based B2B eCommerce system (manufacturer-to-dealer) in the security appliances sector

Personal

- **1982:** born in Potsdam near Berlin
- **2001:** Abitur (German A-levels) at „Evangelisches Gymnasium Hermannswerder“, Potsdam (majoring in „Informatik“ ie. Computing, in addition to English / German / Politics)
- **2001-2002:** Obligatory Civil Service at the retirement home „Bürgerstift Potsdam“
- **2002-2005:** B.Sc. *Computing & Intelligent Systems* at Oxford Brookes University, UK
 - Final-year thesis: „*Persient - An Object Persistence Layer for the .NET Framework*“ (~80 p.)
 - 2nd-place winner of the then-annual, regional *BOCC Systems Development Award*
(see 2005 entries near the bottom of <http://tinyurl.com/phil-bocc>)
- **2005-2006:** Studied *Answer Set Programming* (SAT Solvers etc) at Potsdam University
- **Side projects currently hatching in private / off-hours / weekends:**
 - A PureScript-to-Go transpiler with a primary focus on performance, API completeness (both directions) and correctness
 - editor-agnostic, multi-language (initially Go & Haskell) „IDE middleware / language server“ for use with (initially) VScode & (prospectively) Sublime; written in Go & Node.
- **Hobbies & passing interests:** occasional maintenance of my portfolio of open-source libraries and tools at github.com/metaleap · cycling & weight-lifting · AI / ML · some enthusiasm for history, economics & biochemistry topics · exotic programming languages and theoretical advances in language design, calculi, type systems / type-level programming and generally, richer compile-time verifications