

RAOUL MARC SCHMIDIGER, M.Sc.

IT Dev and Exec & System Architect & Passionate Crypto Coder

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TL;DR

- Professionally into "All-Software" since the mid '90s, from coding, to architecting financial systems and AI strategies
- Experienced developer and executive, working in various roles as team lead, architect, CTO, and co-Founder in DACH, US, Bahrain, and France
- Successful track record of leading and coaching multicultural teams of 12+ developers each, to implement and deliver projects while handling multiple stakeholder groups
- Speaker at international conferences and a multitude of tech talks
- Keen to contribute to building great products and services with exciting tech and teams
- **Now:** Crypto, Blockchain, Reactive, AWS, Kotlin

EXPERIENCE

Crypto Trading System Developer

Self-Employed

 June 2021 – ongoing

 Switzerland / Philippines

Whenever time permits, I am working on a crypto trading system that operates on multiple exchanges. The following list is a rough outline of the project's scope. Each bullet point represents a dimension of work that is either done or in different stages of development.

- Studying and implementing **blockchain** chain analysis tools
- Visualizing **bitcoin** blocks and transaction flows
- Connecting to various centralized exchanges through their respective APIs
- Unifying the **various APIs** into a single data model
- Building a trading **UI**, much like a "remote control panel" to manage orders and positions
- Implementing the infrastructure code to run **automated bot trading strategies**
- Analyzing the real-time market data and implementing trading strategies
- Implementing the infrastructure code to run the **system on AWS**
- Setting up backtesting and simulation environments
- Optimizing the system for low latency and high throughput
- **Refactoring** the codebase to be more modular and maintainable
- Improving trading strategies based on previous results
- Fine-tuning the system's parameters using **machine learning techniques**
- Building **iOS Apps** to monitor and control the system

[Kotlin](#) / [Python](#) / [AWS](#) / [API](#) / [iOS](#) / [Flutter](#)

Principal Consultant / Senior Solution Engineer

The Capital Markets Company S.à.r.l.

 November 2022 – November 2023  Switzerland


CAPCO is an international consulting company with a strong focus on the financial sector.


- **Neue Bank**, Lichtenstein - New Project - July 2023 – November 2023

POWERED BY:


"Let's flatMap that stuff..."

MOST PROUD OF

 **Trust and Conviction**
to set off to uncharted territory to build an AI company in the U.S.

 **Designing & Architecting**
the first online trading platform for structured products around the globe, including the whole microservice banking backbone

 **Hiring & Coaching**
great employees and allow them to grow along with the company

 **Having a Brain**
that is always-on, cross-referencing, and thus finding novel solutions...

STRENGTHS

- Eager to achieve more
- Bridging communication
- Getting priorities right
- Never stop learning

CERTIFICATIONS

Oxford Blockchain Strategy Programme
Said Business School, University of Oxford
Meltem Demirors (CoinShares)
Prof. Dr. Martin Schmalz (Oxford)
December 2022 - [\[link\]](#)

Decentralized Finance (DeFi) Infrastructure
Duke University
Prof. Dr. Campbell R. Harvey
November 2022

The Complete 2021 Flutter Development Bootcamp with Dart
The App Brewery
Dr. Angela Yu
April 2022

Foundations of Objective-C App Development
University of California, UCI

- Implementing DevOps Workflows and CI/CD Pipelines on hybrid cloud infrastructure, Azure
- Preparing Dev Setup for local development and testing
- **Credit Suisse**, Zurich - New Project - Jan 2023 – July 2023
 - Implementing new "private dept platform" to enable future business growth
 - Kotlin, Spring Boot, Angular 13...
- **Swiss Private Bank**, Geneva - AWS ETL Data Pipeline - Nov 2020 – Jan 2023
 - Definition and implementation of a full serverless solution acquiring data from external providers by leveraging **AWS Glue capabilities with Python**, SNS, S3, IAM, Secrets Manager, Parameter Store, RDS/ Snowflake, Step functions, API Gateway, and the AWS CDK
 - Establishment of a data cleaning and quality checking framework by utilizing "Great Expectations" (GX) and implementing a two-step data separation pipeline
 - **AWS CDK** to fully automate cloud infrastructure provisioning and deployment for different environments
 - **Python 3.9** for AWS Glue Jobs using PIP packaging, Lambdas, dynamic Module loading, parallel processing, OO and functional, CSV Parser

Kotlin / Python / Angular / Azure / AWS

Senior Systems Architect

Nintu Informatik AG

📅 May 2021 – Jan 2022

📍 Switzerland

Nintu develops and runs banking APIs that connect businesses to payment providers.

- Connected business' invoice pipelines to banks for the **Swiss EBill System**
- Migrated the codebase **from C++ to Java** and coordinated the integration with the frontend team

Java 11 / C++ / REST / JSON / OAuth / MySQL / Oracle / Play! / Spring / AWS EC2 / Centos 8

Chief Technology Officer

Contovista AG

📅 Aug 2018 – Jan 2021

📍 Switzerland

Contovista analyses financial data with use of AI. Clients integrate with the Contovista stack and integrate the white label components into their online-banking and banking apps.

- Set the strategy of the company with the other members of the **Executive Committee**. Architected the **AI Strategy** together with the Head of Analytics
- Successfully led and architected the **first Swiss implementation of "Multibanking"**, together with Valiant Bank
- Worked together with **Google and Viseca** to understand **CID in the Cloud** given the Swiss Banking Law and **GDPR**
- Led the development team of **12 developers** implementing the AI components into the **core banking systems**, as well as into the **clients apps and online tools**
- Initiated Cloud based systems for realtime performance and quality control monitoring
- Introduced company-wide **software release strategy**, that factored in uncertainty over time, **unifying all departments and clients**
- Represented FinTechs in Switzerland through the **"Open Banking Project"** initiative

1on1's / Scrum / CI-CD / UX / AI / ML / Java 11 / Clojure / Groovy / Swift / Flutter / Kotlin / Jooq / PyTorch / Pandas / Oracle / Angular 8 / OpenBanking API / Swagger / SAML / Kubernetes / Docker

CEO & Co-Founder

Zorp Technologies Inc.

📅 Oct 2016 – Aug 2017

📍 San Francisco, USA

Zorp was a company that built apps around AI based computer vision.

Prof. Dr. Donald J. Patterson

Sam Kaufman

March 2016

Functional Programming Principles in Scala

EPFL, Lausanne

Prof. Dr. Martin Odersky

December 2012

Certified Scrum Master

Scrum Alliance, Zurich

Ken Schwaber

December 2008

TECH

Kotlin Java RxJava React
Angular JavaScript Python
Dart / Flutter JavaFX PHP
Scala Groovy ...

Azure Azure DevOps AWS
AWS Glue AWS Brew AWS IAM
AWS API Gateway AWS Athena
AWS EC2 AWS Route53
AWS Lake Formation AWS S3
AWS Lambda AWS SageMaker
AWS CDK AWS SNS

Crypto iOS Android
AI Blockchain Middleware
Rest React OO Async
SQL GIT No-SQL Bash
Redis OAuth Compilers
Cassandra OpenAPI Swagger
Linux Docker \LaTeX

EDUCATION

M.Sc. in Computer Science

University of Zurich, CH

📅 2000 – 2007

LANGUAGES

German
English
French
Tagalog



- Managed the incorporation and the legal setup with external partners and service providers
- Developed the AI infrastructure and models together with the Swiss partner
- Hired and led a team of 4, including developers and UX-designers

[Legal](#) / [LinkedIn](#) / [AWS EC2](#) / [Java 11](#) / [node.js](#) / [Swift](#) / [UX](#) / [REST](#) / [JDBC](#)

Technical Lead & Partner

getBUTIK GmbH

📅 Mar 2013 – Oct 2016

📍 Switzerland

GetButik offers a versatile webshop and order management system to its 150+ clients. It consists of a single, distributed codebase, that allows maximal configuration flexibility and ease of use, while keeping its complexity hidden from the user.

- Led team of **five developers** developing a **scalable back- and frontend architecture** for the web shop system from scratch
- Facilitated rapid client growth from 10 to **beyond 150+**
- Reached very high automation in client on-boarding through configuration and templating, thus **reducing operational costs dramatically**

[Java](#) / [Python 3](#) / [Scala w25k](#) / [PHP 5.6](#) / [JavaScript](#) / [Play!](#) / [Spring](#) / [Apache2](#) / [Nginx](#) / [DNS](#) / [Cloud](#) / [VM Sphere](#) / [Docker](#) / [JDBC](#) / [OAuth](#) / [Redis](#) / [MySQL](#) / [Galera](#) / [Cassandra](#) / [Bash](#) / [Centos 7](#) / [Postfin API](#) / [SIX API](#) / [Coldfusion 11](#) / [Social APIs](#) / [NWAs](#)

Head Application Development & Chief Systems Architect

Leonteq AG

📅 Sep 2007 – Jan 2013

📍 Switzerland

Leonteq, then EFG Financial Products, was founded in November 2007 to focus on on industrialising the production process for structured investment products. The company IPOed in 2012 and grew from 10 to 300+ employees by 2013. Currently portfolio managed is over CHF 13 billion in outstanding issued products.

- **Head of "Constructor"**, Leonteq's flagship product: **real-time pricing and trading** system for structured products. This **enabled the industrialization** of the production process for structured pricing products
- Led a **team of direct reports of 12+ developers** plus several more on a project basis to create the client facing systems, the system service landscape, and many other internal systems
- Developed uniform, hierarchical **Micro-Service SOA architecture**¹. This allowed for an integrated and **flexible application landscape** that focused on the **automation and synchronization** of key processes across the organisation
- Introduced agile methods, weekly **"One on Ones"**, as well as new technologies like **GIT** and queue-based **middleware**, across the company
- Introduced a **peer based hiring process** that is now used across the whole IT department
- Improved team cohesion by organizing **over 250+ weekly Tech Talks**
- **Architected the integration of 3rd-party** systems into the banks SOA, delivering "high availability" while handling failures of components, and thus split-brain states, gracefully²

[Java 7](#) / [Scala](#) / [JavaScript](#) / [Spring](#) / [GIT](#) / [CI-CD](#) / [RabbitMQ](#) / [Protobuf](#) / [Async SOA](#) / [District9](#) / [Groovy](#) / [JBoss](#) / [Seam](#)

Senior Software Developer

Starticket AG

📅 Feb 2003 – Feb 2007

📍 Switzerland

BOOKS...

- The Art of Scalability
- Scala
- Jitterbug Perfume
- Total Recall
- Code Complete
- Venture Deals
- Cityboy
- The Phoenix Project
- Working Backwards
- Refactoring
- The Effective Executive
- Sapiens
- The Master Algorithm
- Hitch-22
- Radical Candor
- Zero to One
- On the Road
- Waking Up
- I am a Strange Loop
- Lean Startup
- Man's Search for Meaning
- Lying
- The Clean Coder
- Tools of Titans
- Hitchhiker's Guide to the Galaxy
- Power Play
- Island
- Manager Tools
- The Dragon Book
- Bitcoin Standard
- The Big Leap
- Human Action
- Do More Faster
- Clean Coder
- The Emperor's New Mind
- Build
- Extreme Toyota
- Bravo Two Zero
- 4 Steps to the Epiphany
- Dreaming in Code
- DeFi and the Future of Finance

LIFE et al.

- Science
- History
- Technology
- Language
- Economics
- Bitcoin
- Society
- Gravity
- Mathematics
- Humour
- Music
- Art
- Learning
- Development
- Space
- The Rider on the Horse
- Structure
- Flow
- Vibration
- Form
- Division
- Compression
- Density
- Sound
- Shading
- Color
- Flowing
- Ripples
- Waves
- Interrupt
- Melting
- Cracking
- Bending
- Blazing
- Harmony
- Chaos
- Infinity
- Reflection
- Stillness

¹Named "District9", connecting 100+ services (The term SOA was not yet "invented")

²Documentation sample available

Starticket is the ticket provider that invented "print@home", now widely adopted and a term commonly understood.

- Worked on the core team of the "**distributed** ticketing validation **system**"
- Scripted, run, and analysed a test farm of thirty machines for **automatic statistical software testing**
- Decreased the **bug rate** of the system **from around 60% to literally 0%**
- **Designed and architected** the new web shop system. Managed the implementation with a **team in Bangalore, India**

Java 5 / Perl / Bash / MySql / Hibernate / Linux / Tapestry / Spring / CVS

Business Intelligence Consultant (OLAP)

Solution Warehouse AG

📅 Apr 1998 – Apr 2002

📍 Switzerland

Solution Warehouse was a consulting company focused on "Business Intelligence", OLAP. Typical clients were banks, insurances, and large retailers.

- Built **fully dynamic web framework** in HTML/JavaScript for hypercube analysis, data drill-down, report creation and geographical distribution
- Speaker at **European Holos User Conference** Berlin and Basel
- Implemented **DOM2 SAX extension package**³ to be shipped with **Holos version 9.5**
- Clients included: **Deutsche Bundesbank** (Frankfurt), **HUK-Coburg** (Coburg), **R+V Versicherung** (Wiesbaden), **BIS - Bank for International Settlements** (Basel), **Batelco** (Bahrain)

Holos 8.5 (C DSL) / XML Gen / Perl / HTML / JavaScript / DOM / vi / Apache / PHP 3

³XML was just out of the box and the core team in Canada didn't get it yet