

Michael Teter

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Senior Software Engineer, IT Leader

Who am I, and What do I offer?

I am a problem solver. I consider all available angles and requirements when solving a problem or meeting a need. The tools and technologies in play are not an obstacle for me, as I rapidly self-educate so I can utilize the available or ideal tools for the situation.

My passion is making others' lives better, and that often involves using technology to build systems that meet a need while emphasizing correctness, speed, and ease and minimizing cost, ergonomic pain, fragility, and risk.

Because I strive to provide ideal solutions, I have explored many technologies and approaches in my career. Applying this breadth of awareness to many scenarios has helped me develop an innate sense of "What is possible", "What approach is most likely effective", and "What decisions will we not regret in the future".

Overview

- Flexible generalist developer, architect, and problem solver with over 20 years of experience
- Production experience with multiple programming languages, frameworks, RDBMSs, OSs
- Backend development, IT infrastructure architecture and management, consulting, teaching/mentoring, and UX/Usability
- Constantly improving my skills and learning new tools; always open to new possibilities

Current Technologies (available within a day or two of notice)

- Programming Languages and Frameworks: Ruby, Rails, Python
- Databases: PostgreSQL, MySQL

Previous Technologies (available within a couple weeks of notice)

- Programming Languages: Clojure, JavaScript, Elixir, Phoenix, C, C++, Java, Unix/Linux shell
- Databases: Oracle, others

Work Experience

Freelance / Software Engineer and IT Generalist / Netherlands, remote

2015-09 to Current

- Developed custom web applications for retail and content delivery using Ruby/Rails and Elixir/Phoenix with PostgreSQL and MySQL
- Designed and built custom integrations between web backends and Shopify, Wordpress/WooCommerce, and Bitcoin and Stellar blockchains using Ruby, Python, and PHP

Biller.AI / Senior Software Engineer (freelance) / Netherlands, remote

2022-01 to 2022-07

- Developed APIs for internal and external clients using Python, Django, and MySQL
- Demonstrated functional programming and organization approaches that emphasized code reusability, readability, and testability (reduced test code but higher test coverage and faster CI test cycles)
- Reviewed all code PRs and paired with junior devs to guide them toward better practices (single responsibility principle, reduced coupling, functional purity where appropriate)
- Promoted effective and time-efficient SCRUM practices leading to improved product delivery

YoungCapital / Senior Software Engineer / Netherlands, remote

2020-01 to 2021-09

- Developed web applications and APIs using Ruby on Rails, MySQL, Redis, and Sidekiq
- Learned effective SCRUM practices from our in-house SCRUM trainer and applied those with my experience in software engineering and business consulting as SCRUM master for my team
- Introduced elements of functional programming and a service-based approach to the company's monolithic Rails practices
- Reviewed peers' and juniors' code
- Coached junior developers on backend topics and pragmatic + functional programming
- Developed data-driven workflow management system to streamline HR onboarding and offboarding, reducing an error-prone 2 week business process to a 3-4 day process with no chance of gaps or lost candidates
- Contributed to UX designs and product/business system designs
- Planned and implemented major application version migration in incremental, mostly invisible stages with beta and production users
- Optimized backend data management - RDBMS and caching within cloud environment - to reduce cloud costs while increasing speed

IMC / Software Developer and Infrastructure Manager / Netherlands, Amsterdam

2012-09 to 2015-08

Software Development

- Developed web, server, and integration systems in Ruby on Rails for PostgreSQL and MySQL
- Built custom integrations between Excel and internal systems which greatly simplified recurring mid-office trade reconciliation processes while reducing errors
- Redesigned and implemented very large Excel application, reducing open/startup time from 5 minutes to 10 seconds while also vastly increasing runtime performance (using VBA and external database and APIs)
- Improved performance and resilience of recurring large data ingestion processes while reducing human change management and troubleshooting effort (Golang)
- Developed optimal data backup and retention system with Bacula, interchangeable JBODs, and business user-friendly Excel retention policy management interfaces (Clojure)

Infrastructure Management

- Identified multiple weaknesses, risks, and shortcomings of original IT infrastructure
- Researched and devised multiple potential solutions
- Illustrated clear, detailed strategies of replacement systems - including traditional onsite hardware, virtualized onsite hardware, and cloud -, each of which included initial and ongoing budget estimates and pros and cons
- Presented proposals to executive management and key stakeholders, resulting in a selection of an approach (onsite virtualized) and budget approval
- Researched and selected hardware and software vendors, involving key stakeholders in evaluation and decisions where appropriate
- Managed vendors and hardware/software acquisition
- Managed and in some cases personally executed implementation plans of hardware and software
- Designed server rooms and facilities for New York and Amsterdam offices
- End result of new infrastructure provided multiple benefits:
 - - high availability with very low risk of data loss over two continents
 - - vastly increased compute performance for existing software systems
 - - greatly simplified financial analysis and model backtesting experiments via rapid compute provisioning and versioning
 - - virtually eliminated recovery time of hardware failures
- Infrastructure was based on VMware vSphere and VM-aware primary storage, with JBOD secondary storage

Freelance / Software Engineer and IT Generalist / US, remote

2011-03 to 2012-07

- Developed e-commerce web applications in Ruby on Rails with MySQL
- Guided non-technical business leaders on technical topics and solutions

Martin Dawes Analytics (Lavastorm) / Software Engineer / Global, remote

2008-03 to 2011-09

- Developed custom web applications and data analytics integrations for Fortune 100 clients using Ruby on Rails, Oracle, and Lavastorm Analytics Engine
- Helped major telecom companies recover millions of lost revenue by building accurate business rule simulations and reconciling billing with usage data
- Trained and supported global clients in person and remotely

Jetta Operating Company / IT Director / US, Texas, Fort Worth

2001-05 to 2008-01

- Planned and grew corporate IT infrastructure as company tripled
- Developed custom software solutions for oil and gas equipment management, employee time tracking, and client/partner reporting using Java, Python, and MS SQL Server
- Managed vendors and IT support providers
- Developed custom ETL solutions for ingesting disparate data from acquisitions

Previous Work

1993 to 2001

- Developed components and tools for AAA computer game in C++
- Developed manufacturing monitoring and management systems in Java
- Designed large data migration solutions for national-scale network monitoring systems
- Built countless tools and integrations for peers and clients in C, C++, Java, and Unix shell
- Developed GUI applications for aircraft maintenance management systems in C and Motif

Education

Principia College / Bachelor of Science, Computer Science / US, Illinois

1989 to 1993