PERSONAL INFORMATION

NAME
Martin Winkel

ADDRESS
Berlin (Friedrichshain)

LANGUAGES
German: Native speaker
English: Business fluent

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OTHERS

BLOG (MEDIUM)
@SaturnFromTitan

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Lead Software Engineer *and* **Certified AWS Solutions Architect**
with over 10 years of experience, combining deep technical expertise, a strong product mindset, and excellent communication skills.

In 2017, I co-founded and led a software development consultancy focusing on digital transformation. I built and supervised applications of various sizes and business domains for clients ranging from start-ups to DAX companies.

Since 2023, I have been working as a freelance developer and advisor again.

CORE SKILLS

Code
Python: 10 years
Python Web Frameworks (FastAPI, Django, Flask): 7 years
Pydantic: 5 years
Pandas: 5 years
HTML, CSS (Bootstrap, Tailwind): 3 years
Test-driven Development: 7 years

DevOps
Amazon Web Services (AWS): 6 years
AWS Serverless: 2 years
CI/CD: 7 years
Docker: 7 years
Infrastructure as Code: 5 years
Kubernetes: 1 year

Others
SQL Databases (PostgreSQL): 6 years
NoSQL Databases (MongoDB, DocumentDB, DynamoDB): 3 years
Microservices: 6 years
REST APIs (incl. OpenAPI/Swagger): 6 years
GraphQL APIs: 2 years
Event-driven Software Architectures: 3 years

CERTIFICATIONS

AWS Solutions Architect – Associate (SAA-C03)
AWS Certified Developer – Associate (DVA-C02)

WORK EXPERIENCE (EXCERPT)

SENIOR BACKEND DEVELOPER (FREELANCE)
Bayer AG | 01/2023 - 02/2025 | Remote

Python AWS Lambda Powertools, Asyncio, Boto3, FastAPI, Httpx, Locust, Motor, Mypy, PyMongo, Pydantic, Pytest, Ruff, Strawberry   **AWS** API Gateway, Athena, Backup, CloudFront, CloudWatch, CloudTrail, Cognito, Cost Explorer, DevOps Guru, DocumentDB, DynamoDB, EventBridge, Grafana, IAM, Incident Manager, Lambda, KMS, Route53, S3, SES, SNS, SQS, Systems Manager (SSM), Transit Gateway, VPC, WAF, XRay   **Others** Azure DevOps, Bash, Dependabot, Docker, Draw.io, FigJam, GitHub Actions, GitLab CI, Go, ImageMagick, JavaScript, OAuth 2.0, OpenAPI, Sentry, SonarQube, Terraform, TFSec, Trivy, TypeScript   **Work Method** Scrum

Bayer's Crop Protection Innovation Lab builds AI-driven products for farmers (magicscout.app).

- Backend for mobile apps and tens of thousands of IoT devices
- Ingestion of GB's of image data daily using a cost-effective, serverless, event-driven architecture on AWS
- Integration of in-house AI models to deliver insights to customers in seconds
- Proactive voice in architecture and feature design discussions
- Proactive communication across teams
- Reference expert for all questions related to Python

SOLUTION ARCHITECT & ADVISOR (CONSULTANT)
Selly Biz | 05/2023 - 05/2023 | Berlin

Python Airflow, Dagster, Prefect   **AWS** S3, Managed Airflow

Design of a scalable data ingestion application using Apache Airflow on AWS.

- Design of the system directly with the CEO & CTO
- Provide in-depth Apache Airflow knowledge

LEAD FULL STACK DEVELOPER (CONSULTANT)
Selly Biz | 08/2022 - 10/2022 | Berlin

Python Boto3, Celery, Django, Gunicorn, Mypy, Pytest, Weasyprint   **AWS** Route53, S3, SES   **Others** Dependabot, Docker, Draw.io, GitHub Actions, Heroku, HTML, JavaScript, Localstack, OAuth 2.0, PostgreSQL, Redis, Selenium, Sentry, Tailwind CSS

Kickstart a new platform for German companies to hire international kitchen staff (chef-bao.com).

- Custom application that allows companies to add job listings and users to submit their CVs
- In-house experts with domain knowledge (i.e. kitchen staff) review the CVs and match them with job postings
- The applicant-facing pages were optimised for mobile devices and small screens
- After 2 months, the platform went live smoothly to an international user base

LEAD FULL STACK DEVELOPER & CO-FOUNDER
Lemon Tree | 07/2021 - 06/2022 | Berlin

Python Airflow, Alembic, Boto3, Celery, Django, Gunicorn, Mypy, Oscar, Pandas, Polars, Pytest, Ruff, SQLAlchemy   **AWS** IAM, S3, SES   **Others** Amazon Order API, Amazon Ads, Bootstrap (CSS), Dependabot, Docker, Draw.io, Facebook Ads, GitHub Actions, Google Ads, Heroku, HTML, JavaScript, Localstack, Metabase, OAuth 2.0, PayPal, PostgreSQL, Redis, Selenium, Sentry, Stripe

Collaborating with Europe's leading producer (Lonza), we built a start-up to sell innovative food supplements.

- We scaled to a 6-figure annual revenue while automating nearly all recurring operative tasks
- Built the full-stack webshop using the Django Oscar framework
- Payments were handled via PayPal and Stripe
- Built a reporting system using Apache Airflow and Metabase
- Built custom reports combining marketing spending and revenue figures to deepen customer understanding and drive budget decisions (e.g. cohort analyses and customer lifetime value)
- Designed and built a custom bidding algorithm to automate the management of our Amazon Ads campaigns

LEAD BACKEND DEVELOPER (CONSULTANT)
Zalando Marketing Services | 12/2018 - 07/2021 | Berlin

Python Airflow, Boto3, Celery, Django Rest Framework (DRF), Gunicorn, Mypy, Pytest, Requests, Weasyprint   **AWS** Application Load Balancer (ALB), EC2, IAM, Lambda, RDS, Route53, S3, SQS, SES, Systems Manager (SSM)   **Others** Docker, Draw.io, GitHub, Grafana, HTML, Kubectl, Kubernetes, Localstack, Nakadi (Kafka), Nginx, OAuth 2.0, OpenAPI/Swagger, PostgreSQL, Prometheus, React, Sentry, TypeScript   **Work Method** initially Kanban, later Scrum

Zalando was unhappy with their Salesforce integration, so we set out to build a greenfield CRM application to manage sales processes end to end.

- After 2 months, we onboarded the first users; after 4 months, Salesforce was deprecated
- After 1 year, our application had managed campaigns worth >100 million €
- I led the backend team and wrote most of the backend code
- Close collaboration with the CTO, PO, other teams and users
- Proactive ideation of new features and identification of current bottlenecks
- Proactive voice in architecture and feature design discussions
- Proactive communication with other teams across Zalando
- Mentoring of junior developers

BACKEND DEVELOPER (CONSULTANT)
Zalando Marketing Services | 02/2018 - 12/2018 | Berlin

Python Flask, Openpyxl, Pandas, Pytest, Python-pptx, SQLAlchemy   **AWS** Application Load Balancer (ALB), EC2, IAM, S3   **Others** BigQuery, Docker, Draw.io, GitHub, OAuth 2.0, Presto   **Work Method** Kanban

Automate critical sales processes to enable growth.

- Flask-based microservices to create sales reports and slide decks
- Close collaboration with the CTO, BI & Sales

PERFORMANCE MARKETING AUTOMATION ENGINEER
Auto1 AG | 02/2016 - 02/2017 | Berlin

Python Pandas, Pytest   **Others** BitBucket, DigitalOcean, Facebook Ads, Google Ads, Jenkins   **Work Method** Scrum

Dramatically improved efficiency and decision-making with custom tools for online marketing platforms.

- Design and implement a Google Ads bidding algorithm to outperform our competitors drastically
- Build various other scripts and tools to automate online marketing campaign management

WEB ANALYST (PART-TIME)
Spreadshirt AG | 02/2013 - 02/2015 | Leipzig

Adobe Analytics, Excel, Google Analytics, Jira

In-house expert in web tracking and reporting tools.

EDUCATION

UNIVERSITY OF LEIPZIG
Diplom (equivalent to Master of Science) | 10/2010 - 02/2016
Degree program: Economical Mathematics
Specialisation: Mathematical optimisation of business problems
Thesis: Design and implementation of a swarm intelligence algorithm to solve scheduling problems (flow shop)

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