



## **Daniel Schroeder**

**Full Stack Automator**

 Web – <https://www.udondan.com/>

 LinkedIn – <https://www.linkedin.com/in/daniel-schroeder-udondan/>

 Stack Overflow – <https://stackoverflow.com/users/2753241/udondan>

 GitHub – <https://github.com/udondan>

 Twitter – <https://twitter.com/udondan>

 Keybase – <https://keybase.io/udondan>

 Xing – [https://www.xing.com/profile/Daniel\\_Schroeder66](https://www.xing.com/profile/Daniel_Schroeder66)

### **CERTIFICATIONS**

AWS Certified Cloud Practitioner – <http://bit.ly/aws-cloud-practitioner>

### **LANGUAGES**

German (Native)

English (Professional)

### **INTERESTS**

Home automation (IoBroker)

Astronomy



## ABOUT

Professional developer since **2001**.

Take **ownership** of projects, problems and solutions.

Build great tooling. **Bash** hero, **Makefile** ninja.

**TypeScript** and **Python** are the scripting languages of my choice – I try to avoid scripting languages.

**Go** is my preferred language.

The floor is Java!

Can lead, want to code.

I do the full stack:

- ★ Application / Service / Microservice design
- ★ Front- and backend development
- ★ DB schema design – PostgreSQL, MySQL
- ★ Observability – Metrics, logging, tracing
- ★ Server administration / management & virtualization
- ★ Containers – for development, testing, CI and prod
- ★ Infrastructure as code – Terraform, CloudFormation
- ★ Automation
- ★ CI/CD – DotCI, Jenkins pipeline

As important as code is **documentation**: My code ships with Owner's and/or User's manual.

Plenty of experience working in widely **distributed teams**. Working remotely since 2013.

Familiar with many **collaboration tools** such as GitHub, Slack, HipChat, Zoom, Fuze, Jira, Asana, Trello, Confluence, MediaWiki...

Not ashamed to admit: I'm using **Stack Overflow** a lot – but I also give back: #3 contributor for **Ansible**. 41k reputation, in list of top 5% answerers for **git**, **Docker**, **ssh**, **Jinja2**, **CSS**...

Enjoy to contribute to **open source**. Inventor of Ansible Silo – <https://groupon.github.io/ansible-silo/>.

Technologies I want to work with: **TypeScript**, **Go**, **AWS**, **AWS CDK**, **Serverless**, **Bash**, **Automation**, **Docker**, **Chef**

Things I don't want to go back to: Ruby, Java, PHP, .NET

## EXPERIENCES

### Software Engineer SAP Central Services

Nov 2019 – Present

DB Systel – Frankfurt, Germany

- ★ Managing SAP Infrastructure in AWS
- ★ Migrating Ansible and CloudFormation IaT to AWS **CDK** – <https://aws.amazon.com/cdk/>
- ★ Built autoscaling Ansible Tower cluster

### Software Engineer Cloud Core

Nov 2018 – Oct 2019

Groupon Inc – Remote – Frankfurt, Germany

- ★ Managed all company AWS accounts and baseline configuration via Terraform/Terragrunt
- ★ Established a modular, extendable tooling framework based on Terragrunt, aws-okta, tfenv, Terraform Landscape and a lot of Makefile, to get teams started quickly with robust, secure and reliable multi-account IaC
- ★ Designed and built multi-account/multi-environment Terraform CI/CD system based on AWS API Gateway, Lambda, Fargate, DynamoDB and S3

### Software Engineer Infrastructure Engineering

Jul 2017 – Nov 2018

Groupon Inc – Remote – Frankfurt, Germany

- ★ VM provisioning, management and user support (KVM/QEMU/Virsh)
- ★ Developed Golang microservice “application” for managing complete lifecycle of VMs (request, approve, allocation, deployment, migration, deletion) – based on libvirt, Go kit, GORM, PostgreSQL
- ★ VM console tool written in Golang: Automatically creating SSH tunnels to VM hosts, connecting to VNC port for troubleshooting VMs without SSH connection
- ★ Manually migrated and enhanced graphs and dashboards for 23 services from legacy in-house graphing tool to VMware Wavefront
- ★ Created system to cache external package repositories
  - Support for Debian and FreeBSD packages but focus on CentOS/RPM (e.g. EPEL, ELRepo)
  - Snapshot tagging for reproducible installations, “Infrastructure Versioning”
  - Automated upstream syncing
  - ZFS Replication across 3 data-centers
  - Functionality to upload custom packages
  - Based on mrepo, FreeNAS, custom Python tooling and Ansible for standard operations
- ★ Containerization of applications to improve reliability/speed of building, testing and deployment (Docker, Docker service)
- ★ Automated image building via Jenkins, DotCI

## Software Engineer OPS Engineering

Jul 2014 – Jul 2017

Groupon Inc – Remote – Frankfurt, Germany

- ★ Invented Ansible Silo (Open Source) - 100% self-contained drop-in replacement for Ansible, Ansible Version Manager, Playbook Bundler - <https://groupon.github.io/ansible-silo/> – <https://groupon.github.io/ansible-silo/>
- ★ Built “Redis as a Service”, large scale high available Redis clusters with configurable number of shards and replication rings.
  - Based on Redis Sentinel, twemproxy/nutcracker (by Twitter)
  - Standard operations and lifecycle management via Ansible
  - Rack-aware to avoid SPOF
- ★ Created tooling/framework for Ansible >= 1.3 which provided some essential features only introduced with Ansible 2, including Galaxy-like role distribution with support for Ansible plugins
- ★ Set up internal Ansible Galaxy hub and created a complete set of roles for managing whole CentOS 6/7 systems including:
  - DNS resolvers and Named local server configuration
  - NTP configuration
  - sshd configuration
  - Network interface configuration incl. bonding and bridges
  - User management
  - Kernel settings
  - Automatic (+configurable) log rotation
  - Automatic (+configurable) log forwarding to Splunk
  - Automatic (+configurable) metrics forwarding to Nagios
- ★ Ansible callback plugins for sending events to Nagios, automatic downtime, HipChat notifications
- ★ Serverspec tests for testing Ansible roles

## Software Engineer Platform Operations

May 2013 – Jul 2014

Groupon Inc – Remote – Frankfurt, Germany

- ★ Managed global Splunk infrastructure with ~200 indexers and 20+ TB daily indexing volume
- ★ Splunk user support for scheduled searches and dashboards, review and optimization
- ★ Wrote custom Ruby plugins for Splunk searches
- ★ Managed updates and custom app distribution through Splunk Deployment Server

## **Head of PHP Development**

Feb 2011 – Apr 2013

Groupon Inc – Berlin, Germany

- ★ Responsible for building and leading a PHP development team from scratch with up to 35 developers
- ★ Designed and built PHP applications based on Zend Framework for the high traffic system of the Groupon network
- ★ Technical lead for GrouponShop, Job-, Blog- and premium-partner-systems as well as all Online Marketing applications, e.g. Landingpages, Adwords realtime bidding, Newsletter-, Tracking and Ad-Systems

## **Senior PHP Developer**

May 2007 – Feb 2011

publicgarden GmbH – Berlin, Germany

- ★ Created websites for various customers, mostly based on webEdition and Drupal
- ★ Installed, configured and themed various Forum-, Blog- and Shop-systems
- ★ Development of PHP applications and modules for various systems (Drupal, webEdition, Magento)
- ★ Created HTML/CSS-Templates based on PSD drafts

## **Freelancer**

Sep 2004 – Feb 2011

Self-employed – Berlin, Germany

- ★ Contract work for various agencies. HTML, CSS, JavaScript, PHP, CMS (mostly webEdition)
- ★ Created HTML/CSS-Templates based on PSD drafts.

## **IT application development specialist (apprenticeship)**

Apr 2001 – Aug 2004

silver.solutions GmbH – Berlin, Germany

- ★ Apprenticeship “FIAE” (Fachinformatiker Anwendungsentwicklung - IT application development specialist)
- ★ Developed web applications based on HTML, CSS, JavaScript, XML, PHP, webservice and databases (MySQL, Xindice, Tamino)
- ★ Built websites based on content management systems (eZ Publish, Imperia 5)

## **Carer in area of education**

Oct 2000 – Apr 2001

Regenbogenfabrik e.V. – Berlin, Germany

- ★ Took care of children and teenagers in the internet café “Globales Lokal”
- ★ Administered SuSE Linux clients
- ★ First contact with HTML and PHP by maintaining the website of “Globales Lokal”
- ★ Gave HTML introduction courses for interested kids