

PERSONAL INFORMATION

Armağan Karatosun



 Gyönker Str. 103, 64347 Griesheim (Germany)

 (+49)15172028936

 armagankaratosun@gmail.com

 [armagankaratosun.github.io](https://github.com/armagankaratosun)  <https://www.linkedin.com/in/armagan-karatosun-15941182/>  [armagankaratosun](https://github.com/armagankaratosun)

containerguy.io

 Skype armagankaratosun@hotmail.com

WORK EXPERIENCE

01/11/2019–Present

Hosted Processing Support Engineer

EUMETSAT - Contractor, Darmstadt (Germany)

- Participating in the administrative tasks in VMware Integrated OpenStack (VIO) and Open Telekom Cloud (OTC).
- Containerization of the current applications and deployments to the Docker Hosts or Kubernetes (Rancher).
- Automation of the routine tasks with Ansible playbooks such as tenant creations and installing the required software and regular updates.
- Maintaining and automating Openstack image builds with using Jenkins.
- Multi-Cloud Management with Morpheus.
- Monitor resources and user activities to avoid impacts of their processing on the system or other users.
- Help user onboardings to the newly built cloud environment.
- Train tenants on how to use the cloud environment, and provide suitable documentation (e.g. user guides).

10/2018–10/2019

Linux System Engineer

TEB (BNP Paribas), İstanbul (Turkey)

- Designed a PaaS environment from scratch using Kubernetes, Gitlab, Jenkins, Docker private image repository and Ansible.
- Designed an IaaS environment as a R&D center for developers using oVirt as a virtualization platform and integrating it with ManageIQ in order to give our users to Self-Service environment, using GlusterFS as a back-end storage solution and using Ansible Tower and Cloud-init to write automation scripts to provision VMs and create service catalog.
- Using Ansible Tower to make security patches and regular updates, installations regarding the whole VM workloads and deployments on the Kubernetes clusters.
- Configuration management via Ansible.
- Being responsible for the installation, administration, maintenance and the orchestration of the 2k+ Linux and Unix servers.
- Being responsible for the administration, maintenance and the orchestration of the Kubernetes platform.
- Being responsible for the administration, maintenance and the orchestration of the Red Hat Enterprise Virtualization (RHEV) platform.
- Writing Ansible playbooks for automation
- Containerization of the current monolithic applications.

12/2017–10/2018

Linux System Engineer

Equinix, İstanbul (Turkey)

- Participating in the redesigning of the monitoring environment using open-source tools such as Zabbix and LibreNMS.
- Being responsible for the installation (Bare-Metal or VM), administration, maintenance and the orchestration of the Linux Servers.
- Adminstrating cPanel and Plesk hosting platforms.
- Adminstrating the OnApp/Xen based cloud environment.
- Operational tasks such as monitoring the hosts, troubleshooting if the problem arises, security patches and regular updates on the hosts.
- Writing Ansible playbooks for automation.
- Replying customer tickets.

12/2014–10/2017 University project assistant

Istanbul Technical University, İstanbul (Turkey)

- Being responsible for the HPC clusters of the Informatics Institute which serves different fields in science such as Computational Chemistry, Earth Systems Science, Fluid Dynamics and Biomedical Engineering.
- Installing the open-source or proprietary tools that other teams require.
- Monitoring the workload of the servers and take action if needed.
- Operational tasks such as assigning user privileges, troubleshooting, regular updates etc.
- Being responsible for the installations (both OS and the physical hardware) when new servers arrived.
- Developing open source programs for my own research, based on Computational Quantum Mechanics .

EDUCATION AND TRAINING

2018–2020 PhD. in Computational Science & Engineering

Istanbul Technical University, Istanbul (Turkey)

Performed two years of studies in pursuit of a Ph.D. before exiting the program.

2014–2018 Master's Degree in Computational Science & Engineering

Istanbul Technical University, İstanbul (Turkey)

2010–2014 Bachelor's Degree in Mechanical Engineering

Doğuş University, Istanbul (Turkey)

PERSONAL SKILLS

Mother tongue(s) Turkish

Foreign language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C1	C1	C2
A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages - Self-assessment grid

Organisational / managerial skills

- Lifelong learner.

- Good communicator.
- Problem solver.
- I believe in DevOps.
- I am willing to attend and/or speak at industry conferences and share my knowledge with others.

Job-related skills

Programming Languages: C/C++, MPI /OpenMP, Python, Fortran, Bash

CI/CD Tools: Gitlab CI (Gitlab-runner), Jenkins, Git

Automation Tools: Ansible, Ansible Tower, Cloud-init, Morpheus

Monitoring Tools: Nagios(Icinga), Zabbix, PRTG, Monit, Checkmk

Virtualization: Vmware, RHEV, OpenStack, Xen

Containers: Docker, Lxc(lxd), Kubernetes, Rancher

Details:

- Experienced in the installation, automation, and orchestration of the Linux Servers.
- Experienced in designing and delivering automation tools with Ansible and Ansible Tower.
- Experienced in Red Hat Enterprise Linux and other Red Hat products such as Openshift, CloudForms, Satellite and Identity Management.
- Participated in the design and the deployment processes of the PaaS and IaaS solutions and related concepts.
- Experienced with containerization and container management technologies such as Docker, Docker Swarm, and Kubernetes.
- Familiar with Google Cloud Platform, GKE, and Microsoft Azure
- Familiar with continuous integration tools.
- Eager to use and/or adopt new technologies.

Driving licence

B

ADDITIONAL INFORMATION

Courses

- Managing Containers with Docker Learning Path, Pluralsight
- Docker Deep Dive by Nigel Poulton, Pluralsight
- Docker Networking from Nigel Poulton, Pluralsight
- Getting Started with Docker Swarm Mode by Wes Higbee, Pluralsight
- Docker and Kubernetes: The Big Picture by Nigel Poulton, Pluralsight
- The Kubernetes Book by Nigel Poulton
- Introduction to OpenStack - LinuxFoundationX - LFS152x
- Introduction to Kubernetes - LinuxFoundationX - LFS158x
- ITU Linux System Administration Course
- ITU MPI Course
- ITU CUDA Programming Course

Projects

OpenBacchus

OpenBacchus is a backup solution for oVirt/RHEV environment. It is being developed based on Python 2.7, Django 1.10 and oVirt Python SDK 4.1. The backup mechanism behind the Bacchus relies on oVirt Python SDK. It creates a snapshot of a VM, clones a new VM from the snapshot with the prefix bacchus_ and exports this cloned VM to default Export Domain of oVirt/RHV. The snapshot and cloned VM are deleted after the backup is completed.

Memberships

I was an active member of the Cloud-Ring Initiative of the BNP Paribas. Cloud-Ring is an initiative started by BNPP to migrate current monolithic apps into new, cutting-edge microservices in on-premise Cloud environments.

- Publications** [1] Karatosun, Armağan, Mehmet Çankaya, and Adem Tekin. "Symmetry-adapted perturbation theory potential for the adenine dimer." *Physical Chemistry Chemical Physics* 20.41 (2018): 26303-26314.
- Conferences** [1] Armağan Karatosun, Adem Tekin. The Thymine Dimer Potential from a Combined Density Functional Theory and Symmetry-Adapted Perturbation Theory. 52nd Symposium on Theoretical Chemistry, Chemistry in Solution (STC 2016), Bochum, Germany. September 2016
[2] Armağan Karatosun, Mehmet Çankaya and Adem Tekin. Global Optimization of DNA Bases. Computational Chemistry Congress (HKK 2017), Istanbul, Turkey. October 2017.
[3] Mehmet Çankaya, Armağan Karatosun and Adem Tekin. Symmetry-adapted Perturbation Theory Potential for Adenine-Thymine Dimer. Computational Chemistry Congress (HKK 2017), Istanbul, Turkey. October 2017.
- References** Niyazi Elvan – EUMETSAT – Computer Systems and Security Engineer
E- Mail: niyazielvan@gmail.com
Mustafa Kemal Mayuk – Turkish Economy Bank – Unix/Linux and Storage Systems Team Leader,
E- Mail: mustafakemal.mayuk@teb.com.tr