KARL-ANDREAS TURVAS

Systems Engineer







RELEVANT EXPERIENCE

Python Developer & Linux Administrator **CERN (European Organization for Nuclear Research)**

- Feb 2022 Dec 2022
- Switzerland, Geneva
- Developed a Python library/CLI-tool/server that abstracts an overwhelming number of different CERN services via APIs.
- Automated configuration management, VM/Docker image and RPM package builds.
- Coordinated modern development and automation workflows.
- Deployed GitLab Runners and Hashicorp Vault with Kerberos integration on Kubernetes.

DevOps Engineer & Linux Administrator **TalTech High Performance Computing Centre**

- May 2021 Jan 2022
- Harjumaa, Tallinn
- Automated configuration management with GitLab CI and Ansible to increase sysadmin efficiency and infrastructure reliability.
- Set up and configured Hashicorp Vault for internal credentials and secrets management.
- Provided secure solutions to requirements of current and to-be clients of the HPC Centre.
- Managed InvenioRDM-based containerized data repository on Nginx, Flask, Postgre, Elasticsearch.

Chairman of the Board

TalTech Student Council of the School of IT

- May 2021 May 2022
- Harjumaa, Tallinn
- Managed a board of 7 members of the non-profit organisation of nearly 200 members to be voice of IT students.
- Collaborated closely with TalTech, as well as Estonia's largest IT companies and associations alike to enrich the student life by organising educational and entertainment events.

Homelab

Hobby project

- Whenever I find time!
- Home
- Running services on Nomad/Consul container orchestration stack.
- Using Debian based Proxmox distro as the hypervisor on DL380 Gen9.
- Virtual machines provisioned automatically using Terraform and Packer.
- 3D printer automation and internal DNS/DHCP on Raspberry Pis.
- All infrastructure configured by pull-mode Ansible.

SKILLS

Languages

English (CAE C2), Estonian (Native)



Driver license

B. C. D

Programming

Python, C/C++, Bash, Golang, HTML, CSS, PHP, Javascript, Assembly



RaspberryPi, Arduino, PC towers, Cortex-M, routers, servers, NASes, 3D printers



Software

Git, GitLab, OpenStack, Ansible, Hashicorp products, Nginx, Docker, Kubernetes, Flask, Node.js, ReactJS, SQL, Kerberos, Zabbix, LaTeX, Blender, Office 365 Suite, Creative Cloud

EDUCATION

Bachelor's in Hardware Development and Programming

Tallinn University of Technology

Sept 2020 - Ongoing

REFERENCES

Contacts available on request

Thomas Oulevey CERN

Lauri Anton

TalTech HPC Centre

Andres Eek

TalTech Dean's Office at School of IT