# KARL-ANDREAS TURVAS

### DevOps Engineer & Linux Administrator & C/Python Dev







## RELEVANT EXPERIENCE

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

- Feb 2022 Ongoing
- Switzerland, Geneva
- Developing a Python library/CLI-tool/server that abstracts an overwhelming number of different CERN services via APIs.
- Automating configuration management, VM/Docker image and RPM package builds.
- Coordinating, migrating to modern development and automation work-
- Deploying 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 infra 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

- Oct 2022 Ongoing
- 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**

#### Lauri Anton

TalTech HPC Centre

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#### **Andres Eek**

TalTech Dean's Office at School of IT

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