KARL-ANDREAS TURVAS

Systems Engineer

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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 workflows.
- 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 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

Hardware
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

Lauri Anton
TalTech HPC Centre

Andres Eek
TalTech Dean's Office at School of IT

Thomas Oulevey
CERN