KARL-ANDREAS TURVAS

Systems Engineer

@ karl@jamfox.dev 📞 +372 5333 7528
🌐 jamfox.dev in kturvas ⌗ JamFox

PROFFESIONAL EXPERIENCE

DevOps Engineer & Linux Administrator
TalTech High Performance Computing Centre

📅 Feb 2023 – Present 📍 Estonia, Tallinn

- Modernizing Ansible based configuration management for clusters of CPU and GPU computes.
- Managing a internal Proxmox cloud with Packer, Terraform and Ansible.
- Developing GitLab CI solutions for automated testing and builds.
- Managing and improving Zabbix/Syslog/Loki based observability stack.
- Developing OpenOnDemand HPC solutions.

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.
- Deployed GitLab Runners and Hashicorp Vault with Kerberos integration on Kubernetes.

DevOps Engineer & Linux Administrator
TalTech High Performance Computing Centre

📅 May 2021 – Jan 2022 📍 Estonia, Tallinn

- Automated configuration management with GitLab CI and Ansible.
- Set up 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 📍 Estonia, 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.

GENERAL

🗚 Languages
English (CAE C2), Estonian (Native)

🚚 Driver license
B, C, D

🎨 Hobbies
10K Obstacle Runs, Photography, Writing, RPG Tabletops

EDUCATION

Bachelor's in Hardware Development and Programming
Tallinn University of Technology

📅 Sept 2020 – 2024 (Gap year at CERN)

REFERENCES

Thomas Oulevey
@ CERN
✉ Contact available on request

Lauri Anton
@ TalTech HPC Centre
✉ Contact available on request

Andres Eek
@ TalTech School of IT
✉ Contact available on request

OTHER EXPERIENCE

Homelab
Hobby project

📅 Whenever I find time!   📍 Home

- HashiCorp Nomad Container Orchestration Cluster
- Family Picture and File Cloud Service
- Prometheus, Grafana, Loki Monitoring
- Home Wireguard VPN
- Selfhosted services and gameservers
- Ansible, Packer, Terraform IaC
- MkDocs Material Documentation
- 11ty Personal Site
- Obsidian Second Brain Notes Site

SKILLS

Programming
I love systems programming, but mostly scripting for sysadmin.

Systems: Assembly, C/C++, Rust
Scientific: Python, MATLAB
Scripting: Bash, Go
Web: HTML/CSS, PHP, Javascript, Ruby

Hardware
Your cable management better be organized and pretty!

Servers: Raspberry Pi, HP, Supermicro, Fujitsu
PCs: Building gaming computers in different form factors
Controllers: Arduino, ARM Cortex-M
Switches: TP-Link, Extreme
NAS: Synology
3D Printers: Anycubic

Software
Motivated by trying new things and doing them properly.

Collaboration: Atlassian
Version Control: GitLab, GitHub, git
CI: GitHub Actions, GitLab CI/CD
On-Premise Cloud: OpenStack, Proxmox
Off-Premise Cloud: AWS
Configuration Management: Ansible, Salt, Puppet
IaC: Packer, Terraform
Containers: Docker, Podman
Orchestration: Kubernetes, Nomad, Consul
Monitoring: Zabbix, Nagios, Prometheus, Grafana
Logging: Rsyslog, Loki
Documents: Overleaf, LaTeX, Office365, Google Docs
Media: Creative Cloud, Blender
AI/ML: Stable Diffusion, YOLO
Web: React, SSGs

MORE ABOUT ME

🕐 **Active**
4-day workweek is important to me to balance time around personal projects, volunteering, and close ones

🛏 **Night Owl**
I prefer late nights and mornings

👥 **Team player**
Socializing and working together gives meaning

👆 **Leader**
I tend to take the lead if I can make a difference

🧰 **Context switcher**
I like working on 2-3 projects at once

🗓 **Organizer**
Love for automation, reproducibility, and documentation

🤸 **Teacher**
Delivering clear and concise instruction with patience

⏩ **Top-Down Thinker**
Filtering the unnecessary for effective problem-solving and decision-making