

Employment

Student Assistant **TU Clausthal, Datacenter** **Apr 2016**

- I created knowledge via building a proof of concept for deploying Virtual Tunnel End Points (VTEPs) with Ansible on Linux machines for EVPN BGP/VXLAN.
- I reduced toil from multiple hours to an automated system with automating daily email based firewall IPS/IDS alerts via the Forcepoint NGFW Python API.
- I improved system security and reliability with setting up an OpenVAS vulnerability scanner.
- I reduced MTTR from one work day to one hour with automating a Freeradius/Radsecproxy/MySQL based AAA infrastructure with Ansible.
- I increased virtual machine reliability via creating a Proxmox VE cluster consisting of 25 machines.
- I reduced toil from multiple hours to an automated system with writing a Python client for deploying TLS certificates and private keys on a Forcepoint NGFW for TLS inspection.
- Additional tasks were monitoring (NSCA, NRPE, SNMP), webserver (Nginx, Apache), network Automation (NAPALM, Ansible) and storage (NFSv4 over Kerberos).

Student Assistant **TU Clausthal Inst. of Software Systems Engineering** **Oct 2016 – Sep 2017**

- I build a tool chain for exporting Matlab Simulink models into the Functional Mockup Unit (FMU) format.
- I developed components for a model transformation tool suite in the project *Spectral Analysis of Software Architecture*
- I enhanced code quality with establishing the Continuous Code Quality tool Sonarqube.
- I used the following technologies for accomplishing these tasks: Java, Gradle, Matlab, SVN

Student Assistant **TU Clausthal Inst. of Mathematics** **Apr 2014 – Sep 2017**

- I increased system reliability with monitoring via the Nagios fork Centreon and using the protocols NRPE, NSCA, SNMP.
- I reduced toil with building linux packages for Ubuntu and CentOS.
- I have administrated Linux and Windows machines and gave first level support.
- Furthermore I have wrote bash scripts, created a NFSv4 server with Kerberos, managed Apache webserver, CUPS printing server, a Firefox sync server for bookmarks and passwords, and a MySQL server.

Education

Clausthal-Zellerfeld, Germany **Technical University Clausthal** **October 2013**

- Bachelor of Science in Computer Science.

Open Source Contribution

Arch Linux **<https://archlinux.org>** **January 2015**

- **Security Advisories** Verifying known Common Vulnerabilities and Exposures (CVEs) in Arch Linux packages.
- **Hardening** Improving Security of Arch Linux packages and infrastructure.
- **Package Maintainer** Building source code into Arch Linux binary packages for distribution, committing patches and supporting the community.

Projects **<https://github.com/shibumi>**

- **Arch Linux Boxes** Building reliable infrastructure for automated monthly Vagrant builds with Ansible and Hashicorp Packer.
- **ProcFS** Adding support for CIFS in the Prometheus Node Exporter component ProcFS.

- **Fighting Malware** Participation in fighting global botnets and malware: https://www.virusbulletin.com/uploads/pdf/conference_slides/2015/KalnaiHorejsi-VB2015.pdf.

Languages, Technologies and Interests

- Python, Golang, Java, C, C++, Bash, German, English
- I have a huge interest in Site Reliability Engineering (I've read the book *Site Reliability Engineering* and watched various Youtube videos by Stephen Thorne, Seht Vargo, Liz Fong-Jones, JC van Winkel and Nori Heikkinen).
- I am 70% Ops, I hope I can improve to a more SRE healthy 50/50 composition.
- Besides DevOps and SRE I am interested in security (malware, forensics, binary exploitation, hardening servers and services).
- What I want to learn: I want to learn how to doing splits between embracing risk and providing system reliability with multiple 9s, how to contribute to big Golang projects like Kubernetes or Istio and how to manage datacenters with a combination of Jupiter, Borg, B4 and Colossus.