MUHAMMAD KAMRAN AZEEM

kamranazeem@gmail.com, +47-45571149, Oslo, Norway

CONSULTANT for INFRASTRUCTURE and INFORMATION SECURITY

EDUCATION: MS Information Technology

CERTIFICATIONS: CKA, CISSP, CEH, RHCE, CCNA, OCP (DBA)

COURSES: Kubernetes, Docker, OpenStack, AWS System Administrator, Terraform, Git, Gitlab, Jenkins, Platform Manager/Scali Manage, Oracle 9i R2 RAC, TeraData Factory, Oracle Developer 2000, Visual Basic 5, Python, C/C++, KVM

I am good at:	**Personality traits:**
* Network and systems security / Policy designing	* Down to earth, Soft spoken, Straight forward
* Infrastructure design & maintenance	* Focused, Structured, Quality conscious
* Shell scripting / Automation	* Flexible, Always eager to learn more
* System administration, DevOps	* Sociable, Work in teams as well as individually
* **Teaching** , Training and Documentation	* Like to share my knowledge, Public speaker

EXPERIENCE & SKILLS:

- **~25** years in IT.
- Containers / Cloud technologies (5 years) [Kubernetes, Docker, AWS, GCE, Terraform]
- Programming (25+ years) [COBOL, C/C++, Oracle Developer, VB, SQL, PL/SQL, PERL, BASH, Python]
- System Administration (20+ years), [Red Hat, CentOS, Fedora, Debian and derivatives]
- Database Administration (20+ years), [MySQL, PostgreSQL, Oracle 8/9i/10g, Oracle RAC 10g]
- Information Security (15+ years), [Firewalls, IDS, Server Hardening, Policy designing, etc.]
- Virtualization (12+ years), [KVM, XEN, Hyper-V, VMware]
- High Performance Computing (**5** years), [Cobbler, Cluster Vision OS, IBM Platform Manage/Scali]
- High Availability (14+ years), [Heartbeat, LVS, PaceMaker, CoroSync, DRBD]
- Continuous delivery / automation [Gitlab CI, Github Actions, CircleCI, Puppet, Ansible]
- Training (20+ years). [Taught at various universities, professional institutes. Teaching modern IT technologies to the world on YouTube through my channel https://youtube.com/wbitt since 2006]

EMPLOYMENT HISTORY:

August 2022 – Today: HubOcean, Oslo, Norway

At HubOcean, I am working as DevOps Engineer . This company deals with big data related to the ocean, such as shipping emissions, fisheries, etc, and has a data and compute platform to help assist scientists do scientific investigations, and help governments and ocean governing bodies around the world to make better policies and take actions to help the ocean. The infrastructure is setup in the Microsoft cloud (Azure), and I help in infrastructure management, security, monitoring and adopt Agile practices. The platform primarily consists of Kubernetes clusters, and JupyterHub and DASK hub running on top of them, all managed through Terraform, using infrastructure-as-code guideline. The software we develop is deployed continuously through deployment pipelines. We also run various data-ingestion pipelines using Prefect, which help ingest large amounts of data from data sources such as World Ocean

Database, etc. I also write a lot of documentation. Recently I created Kubernetes network policies to improve security of DASK hub.

March 2015 – July 2021: Praqma AS, Oslo, Norway

At Praqma, I worked as <u>Senior Consultant for Infrastructure and Operations</u> . I helped clients adopt modern software development and infrastructure management practices, such as Continuous Delivery, Infrastructure As Code, etc. I have designed and implemented solutions built around Kubernetes, Docker, Git, Puppet and high availability technologies. I also helped clients migrate to AWS and GCE cloud platforms. I have spoken at conferences, educational institutes and meet-ups, covering Docker, Kubernetes, Information Security, etc .

March 2018 – Today: WITLINE, Birmingham, UK

WITLINE was previously known as AutoGateway. So this is basically continuing with same people. Two years ago, I took additional role of <u>Agile Coach</u> - while still working remotely as <u>Infrastructure Manager</u> - and helped the software development team adapt agile methodologies and tools, and then helped them migrate their monolithic applications from traditional virtual machines, to Docker containers, now running as micro-services in Google Kubernetes Engine at Google Cloud Platform. Later in the process, I helped them implement Continuous Delivery for their software using Gitlab CI.

March 2005 – 2018: AutoGateway, Birmingham, UK

At Autogateway, I worked remotely as <u>Infrastructure Manager</u>. Over past **15+ years** I have been responsible for **designing and securing AutoGateway's infrastructure**, and running the IT operations. I have helped design and run two data centers, and several independent servers. I utilized high availability and virtualization technologies, as well as did lot of automation, documentation, server/service hardening, etc. I have been advising software developers, system admins, and DBAs on how to write better and secure code and how to keep AutoGateway's infrastructure secure.

August 2014 – March 2015: Epleslang AS, Oslo, Norway

At Eplesland, I worked as <u>IT Consultant</u> at a temporary position. I helped **improve company's information security posture**. I also managed their website. Delivered a training/workshop on "Securing your digital life".

July 2013 – November 2013: Teletopia AS, Oslo, Norway

At Teletopia (also known as TeleWorks), I worked as <u>Linux System Administrator and Information Security Officer</u>. Managed 100+ Linux servers, and some Windows servers. Helped **re-design the entire IT infrastructure** to make it more resource efficient, performance better, and secure. My design and suggestions resulted in **reducing the number of physical servers from 100+ to under 12**. I automated several tasks, using BASH shell scripting, and tuned various servers and services for performance an security. Main technologies used were: Linux (CENTOS, Debian), KVM Virtualization, Apache, Tomcat, MySQL, PostgreSQL.

March 2013 – July 2013: Fine Distribution AS, Oslo, Norway

At Fine Distribution, I worked as <u>Information Security Officer</u>. Designed, setup and ran the **IT infrastructure** for the company. Created and **implemented IT security policy** for the company, automated server tasks, tuned and **hardened servers**, implemented **firewalls**, and setup **secure wireless access network**.

August 2008 – February 2013: Arabic Computer Systems. Al-Khobar, Saudi Arabia

At ACS, I worked as <u>Senior Software Engineer</u>. I worked directly with Saudi Aramco's HPC (Super Computing) department for their HPC projects, including setting up, maintaining, monitoring, documentation and training activities. I conducted training for Aramco HPC/CSYS groups. I also co-authored training material. Worked with ACS's clients on projects related to **infrastructure**, databases, storage, virtualization, and **information security**. I frequently conducted volunteer training sessions for server maintenance, Linux and HPC technologies to up-skill my colleagues.

January 2005 – November 2007: Ora-Tech Systems, Islamabad, Pakistan

At OraTech, I worked as <u>Oracle DBA</u>, and <u>Consultant for Linux and Open-Source Technologies</u>. I setup company's **IT infrastructure**, including **firewalls**, e-mail servers, etc. I managed (and co-worked with) teams of DBAs, system administrators and network engineers to provide technical support for OraTech's clients. The services included support services, training and documentation.

June 2004 – July 2005: NCR Education Center, Islamabad, Pakistan

At NCR, I worked as an <u>instructor</u>, and conducted professional level training for Linux System Administration courses, which were part of a government project run by Pakistan Computer Bureau to increase Linux-awareness in the country.

January 2004 – April 2004: Petroman Training Institute, Islamabad, Pakistan

I re-joined Petroman as Visiting Faculty Member in January 2004. I taught Software Engineering, Data Communications and RDBMS to diploma and undergraduate students.

September 2000 – May 2001: Preston University Kohat, Islamabad, Pakistan

At Preston University, I was a Visiting Faculty Member during evening times. I worked as a lecturer for Oracle8, Data Structures and C++ to graduate and undergraduate students.

August 2000 – January 2001: Petroman Training Institute, Islamabad, Pakistan

At Petroman, I was a Visiting Faculty Member during evening times. I taught C / C++ to students from diploma and undergraduate programs.

June 1995 – January 2005: KB Computers, Islamabad, Pakistan

KB Computers was start of my career. There I started working as a PC technician, and then moved on to participate in software development, and eventually became Technical Manager in the last years. I assembled and troubleshooted PCs in early days, and provided volunteer training to up-skill colleagues. During the last few years, I took part in commercial software development using Visual BASIC, PERL, Postgresql and Linux.

PUBLICATIONS & VOLUNTARY WORK:

- Author of *Pakistan's first book* on Linux administration, titled: "**Linux Pocket Reference for System Administrators**". (Download-able free of cost from <u>http://wbitt.com/books.html</u>)
- Technical Reviewer for the book "**CentOS High Performance**" by Gabriel Canepa
- Author of numerous Training Videos (CBTs), HowTos, Research Papers on the topics of "Linux System Administration", "Virtualization", "HPC" and "Information Security". Technical articles are available at <u>https://wbitt.com</u> . All videos available through my YouTube channel: <u>http://youtube.com/KamranAtWBITT</u>
- Spoke at KubeCon 2017 (Kubernetes Conference) , about Kubernetes High Availability. (<u>https://youtu.be/ojZT1sKCGQs</u>)

REFERENCES:

- Jo Øvstaas from HubOcean, Oslo, Norway. jo.ovstaas@oceandata.earth , +47-41608685
- Michael Long from Compliance DB, Oslo, Norway. mike@merkely.com, +47-47676360
- Sami AlAjrami from Eficode, Oslo, Norway. sami@merkely.com, +47-46377571
- Murtaza Syed from WITLINE, Birmingham, UK.   syed@autogateway.com, +44 7476 241925
- Issa Abd Ahad from Arabic Computer Systems, Al-Khobar, Saudi Arabia. issa@mtcmea.com , +966-13-8642221

OTHER: LinkedIn profile: https://www.linkedin.com/in/muhammad-kamran-azeem/