Marcus Yanello

Houston, TX @ marcus@yanello.net 🔗 Portfolio

MYanello   MarcusYan

Experience

Rescale   **April 2024 - Now**
Software Engineer

- Iterate upon existing cloud networking infrastructure to ensure customer privacy and privacy by automating deployment of customer specific Cloud Private Networks (VPC and VNet)

Rescale   **September 2023 - April 2024**
Senior Support Engineer

- Recognized as the SME for licensing and networking in the product, contributing to the team's overall expertise.
- Developed documentation and training programs along with mentoring new hires, fostering team members' proficiency in networking, licensing, simulations, and HPC.

Rescale   **November 2021 - September 2023**
Support Engineer

- Successfully developed proof-of-concepts for network and simulation architecture through active participation in customer calls.
- Resolved complex software and MPI issues for simulation suites, improving the reliability and functionality of ANSYS, Siemens and other engineering applications.
- Led the migration of internal network infrastructure in the cloud, aligning with security requirements and ensuring a smooth transition between servers.
- Collaborated cross-functionally with Field and Engineers to guarantee customer needs were met.
- Efficiently managed customer and internal SSH tunnel and IP forwarding proxies, ensuring secure and reliable communication channels.
- Played a key role in the development and deployment of IPSec and Wireguard VPN solutions in collaboration with partners and customers.
- 2023 and 2022 Grit Club Award, voted top 5% performer of the year

Hewlett Packard Enterprise   **May 2019 - November 2021**
Mechanical Product Engineer   Houston, TX

- Orchestrated the development of automated dashboards, revolutionizing the tracking and reporting of team Key Performance Indicators (KPIs) to upper management.
- Evaluated initial products to ensure strict adherence to HPE and regulatory standards, ensuring the highest quality and compliance in product offerings.
- Executed a strategic initiative resulting in the reduction of the box portfolio by half, uncovering $1M in billing errors.

Projects

Network Administration

Established DNS records to facilitate open access to self-hosted services, implemented a VPN for secure access to SSH and Samba shares, configured a self-hosted local DNS for ad-blocking and local hostname resolution. Operated an NGINX proxy to efficiently forward traffic, and ensured the security of WAN traffic by utilizing SSL certificates.

Firewall

Effectively administer firewall resources within the local network to enhance security and privacy. This involves configuring and monitoring firewall settings to control incoming and outgoing traffic, safeguarding against unauthorized access and potential threats using VLANs, IDS, and Fail2Ban.

Docker and Apptainer

Implemented containerization techniques to efficiently manage home media, monitor network performance, securely store passwords, and seamlessly enable High-Performance Computing software to operate in the cloud.

Reverse Proxy

Implemented a secure and high-availability (HA) setup using HAproxy and Nginx to establish reverse proxy services for local applications.

Education

Texas Tech University   **August 2015 - May 2019**
B.S. Mechanical Engineering   Cum Laude