Sashwat K

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PROFILE

Experienced systems engineer with a strong background in cloud infrastructure, automation, and confidential computing. Passionate about designing secure, scalable, and production-grade systems.

EXPERIENCE

- **IBM ISDL** Hybrid
  Senior Engineer (Full Time) *Jul 2022 - Present*
  - **LinuxONE Baremetal on VPC in IBM Cloud Project**:
    - Developed and maintained SLES and RHEL OS for LinuxONE Baremetal on VPC (Virtual Private Cloud) for IBM Cloud.
    - Developed and automated the building of OS images that supported zVSI (KVM on Z) and LPAR on IBM Cloud VPC.
    - Developed automation scripts for maintaining LinuxONE Baremetal.
    - Contributed to the implementation of SSC (Secure Service Container) on LinuxONE Baremetal on VPC.
  - **HPVS (Hyper Protect Virtual Server) On-Prem and IBM Cloud Confidential Computing Project**:
    - Developed and maintained a Terraform provider for HPVS, supporting the latest releases for both on-prem and IBM Cloud.
    - Developed new systemd services and updated bootloader to add features such as static IP, contract expiration, and custom tag support in logs.
    - Developed scripts to automate manual release tasks to reduce manual effort for DevOps team.
    - Addressed customer issues related to the HPVS Terraform provider.

- **AMD Inc.** Hybrid
  Silicon Design Engineer (Full Time) *Feb 2022 - Jul 2022*
  - **AMD - Xilinx Integration**: Help update infrastructure to help bring synergy between AMD and Xilinx systems Revision Control System, License Servers etc.
  - **Programming**: Developed and maintained scripts for maintaining ICManage servers (users, workspaces etc), FlexLM license files, benchmarking new servers
  - **Collaboration**: Delegate with Silicon Engineering teams and IT to complete projects.

- **Xilinx Inc. (Acquired by AMD Inc.)** Hybrid
  CAD Engineer (Full Time) *Jul 2021 - Feb 2022*
  - **Management**: Implement policies for LSF queues and Storage.
  - **Programming**: Develop and maintain ICManage Library creation.
  - **Documentation**: Create, update and document processes using Jira and Confluence.

- **Xilinx Inc. (Acquired by AMD Inc.)** Hybrid
  CAD Infrastructure DevOps Engineer (Contractual) *Jun 2020 - Jul 2021*
  - **Programming**: Developed and maintained script to maintain server netgroup files of hosts in LSF clusters.
  - **Maintanence**: Maintain ICManage GDP, LSF application profiles, LSF License Scheduler and EDA tools.

EDUCATION

- **College of Engineering Trivandrum** Thiruvananthapuram, India
  MCA; GPA: 7.0 *Aug 2017 – Apr 2020*

- **Christ Nagar College** Thiruvananthapuram, India
  BCA; GPA: 7.2 *Jun 2014 – May 2017*

- **Kendriya Vidyalaya AFS Akkulam** Thiruvananthapuram, India
  High School Computer Science *Apr 2012 – Mar 2014*

SKILLS SUMMARY

- **Languages**: Go, Python, Bash, C, Data Structures and Algorithms
- **DevOps & Tools**: Terraform, Docker, Git, Jenkins
- **Infra & Platforms**: Linux, Systemd, IBM Cloud, LPAR, zVSI, z/VM
- **Concepts**: Virtualization, Confidential Computing, Infrastructure as Code (IaC)

Projects

- **Portfolio Website**: A portfolio website anybody can use along with containerization and Terraform to generate temporary SSL certificates and host on AWS. Available at GitHub - sashuu69/portfolio-website.
- **Fingerprint-based Exam Authentication System**: Biometric verification system to prevent impersonation in exams. Arduino-based handheld device for authenticating students and invigilators.
- **IoT Water Level Indicator**: Automated tank and garden watering system using moisture sensors and NodeMCU. Available at GitHub - sashuu69/iot-water-level-indicator.
- **ATmega328P Production-Ready Board**: Compact Arduino UNO-compatible board (SMD and DIP) with Eagle design files. Available at GitHub - sashuu69/sph-mc-one.

Honors and Awards

- Significant Contributor, TCAP (IBM) - Open source contributions towards terraform provider for hyper protect virtual servers
- Growth Award 2025, QCAP (IBM) - For significant contributions towards Hyper Protect Virtual Servers (HPVS) and Z Virtual Server Instances (zVSI)
- Star Performer, All India MCA Meet 2019 (NIT Trichy)

Volunteer Experience

- **Internet of Things Lab, College of Engineering Trivandrum**   Thiruvananthapuram, India
  Conducted workshops on Arduino, Raspberry Pi, BeagleBone, Python   *Oct 2018 – Apr 2020*
- **RASA Hams - Ham Radio Community**   Thiruvananthapuram, India
  Collaborated with local amateur radio enthusiasts for learning and experimentation   *Jan 2018 – Present*