Mr. LÊ PHƯƠNG HIẾU
DevSecOps

CONTACT

Location: HoChiMinh City, Vietnam (UTC+07:00)
Phone: (+84) 975 669 775
Email: phuonghieuag@gmail.com
Other: https://IamDevOps.Dev

PROFESSIONAL SUMMARY

Sysadmin and DevSecOps, bringing more than ten years of experience applying high technology and responsibility as blueteam (6 years in Sysadmin and 5 years in DevOps). Having been through various projects and companies, I have gained an objective perspective as well as the ability to learn new things, new technologies, and adapt quickly to work environments. Through traveling to many places and seeing many things, I am able to bring valuable experiences and apply advanced tech stack from top the world to my clients. In the role of a red team, I have valuable insights into identifying and addressing security vulnerabilities, which I can leverage to help organizations enhance their security posture while working collaboratively with the team

SKILLS / TOOLS

- CI/CD: Jenkins, Gitlab-CI, ShellScript (zshScript, Bashscript),...
- Container Runtime: Docker, Podman, Containerd, Kuberneties, OpenShift.
- Operating system: ArchLinux, CentOS/RHEL 7, Ubuntu, Windows.
- Networking: Cisco Certified Network Associate.
- Operating network system: PfSense, OpenWRT, DD-WRT.
- Database: MySQL / MariaDB, TiDB, Postgresql,..
- Cloud: AWS, Google Cloud, Azure Cloud
- Infrastructure as code: Terraform, Helm
- Configuration Management: Ansible.
- IDE/CASE tools: Visual Studio, VIM.
- SCM: Subversion, Git.
- Build tools: Ant, Maven, Gradle, Go.
- Monitoring/Logging/Reporting: Grafana, Prometheus, ELK, OpenTracing, OpenTelemetry
- Revert Proxy: HAProxy, Nginx
- Artifactory: Jfrog Artifactory, Nexus Artifactory (SonarType)
- Threat detection: Falco, Gatekeeper (OPA), Prowler, Trivy, Docker Security, Snyk
- Infomation collector: Anubis, Nmap (NSE),...
- Explorit Tools: sqlmap, metasploit, netcat,...

EXPERIENCES

Parcel Perform, 📍Ho Chi Minh City (VN) — *Senior DevSecOps*

📅 Jul 2022 - Dec 2022 👷 Team size: 6

Parcel Perform is a Singapore-based software company that provides shipment tracking and delivery management solutions to businesses. As a DevOps member, my responsibilities included developing CI/CD pipelines, providing system security advice, and integrating tools for early detection of security threats. I worked closely with the development team to ensure the successful deployment of applications while maintaining high levels of security and compliance. Additionally, I monitored the system for potential security threats and implemented measures to prevent data breaches or other security incidents.

- Implemented Prowler to detect misconfigurations, and Falco and Gatekeeper for retrospective security breach analysis, enhancing overall system security and compliance.
- Increased Infrastructure as Code (IaC) automation to nearly 100% by utilizing GitOps, Helmfile, Helm, Terraform, Gitlab, and Atlantis.
- Implemented KEDA (Kubernetes-based Event Driven Autoscaling) to enable better Horizontal Pod Autoscaling (HPA) for Spark and Flink workloads, improving system performance and scalability.
- Implemented AWS IAM Roles for Service Accounts (IRSA) to grant permissions to developers and projects, providing a more secure and efficient alternative to role-based, instance-based, or inline permissions management.
- Identifying potential security vulnerabilities and recommending solutions to mitigate them. Educating and training employees on security best practices and procedures to promote a strong security culture.

HomeCredit VietNam, 📍Ho Chi Minh City (VN) — *Senior DevOps*

📅 Aug 2021 - Jul 2022 👷 Team size: 14 (as product team)

HomeCredit is a consumer finance company that provides loans and other financial services to individuals who have limited access to traditional banking services or credit. As a DevOps member of the Product team at HomeCredit, my responsibilities included deploying and monitoring the application used to manage sales. I worked closely with the development team to ensure timely and efficient deployment of the application, and monitored its performance to identify and troubleshoot any issues that arose. Additionally, I collaborated with other teams to ensure smooth cross-functional communication and alignment of goals.

- Developed CI/CD pipelines using shellscript and Azure DevOps, streamlining software delivery and improving the efficiency of the development process.
- Implemented monitoring of AKS using Prometheus and Grafana, and developed tools using Python to enhance alerting capabilities, improving overall system reliability and availability.
- Implemented Azure alert to monitor and notify about system events and status changes
- Implemented Azure Application WAF (Web Application Firewall) to protect web applications from common attacks such as SQL injection and cross-site scripting, enhancing overall application security and preventing data breaches
- Managed AKS (Azure Kubernetes Service) to ensure high availability and scalability of containerized applications, while also monitoring and troubleshooting any issues that arose.

VNG - Zalopay, 📍Ho Chi Minh City (VN) — *Senior DevOps*

📅 Jun 2020 - Jul 2021 👷 Team size: 2

ZaloPay is a digital wallet and payment platform based in Vietnam. It is part of the Zalo ecosystem, which includes a popular messaging app in Vietnam. ZaloPay enables users to make payments for a variety of services, such as utility bills, online purchases, and mobile top-up. My role and responsibility are collaborated with developers to deploy infrastructure and applications, and served as the first point of contact when issues arose. Assisted in troubleshooting and resolving problems to ensure smooth operations.

- Set up and maintained infrastructure, from servers to systems such as Kubernetes, TiDB, MySQL, TiKV, Kafka, Cassandra, etc. to ensure high availability, scalability, and reliability.
- Utilized Jenkins scripted pipelines and dynamic agent builders to optimize the build stage in CI/CD, resulting in reduced build time and faster software delivery.

- Developed monitoring tools using Golang to monitor legacy systems that lacked monitoring capabilities, improving overall system performance and reliability.
- Implemented RKE v1 for faster infrastructure initialization, reducing setup time and improving overall system performance
- Implemented monitoring using Grafana, Prometheus, and OpenTracing to track system performance, and set up alerts to notify via Telegram and Microsoft Teams for timely issue resolution.
- Migrated manual steps to automation using Python scripts, resulting in streamlined workflows and reduced errors, ultimately improving efficiency and productivity.
- Migrated Kubernetes Metallb to Ingress for improved network load balancing, and managed permissions using RBAC for enhanced security and access control.
- Conducting vulnerability assessments and penetration testing to identify weaknesses and recommend security improvements.
- Developing and implementing security policies and procedures to ensure compliance with industry standards and regulations.
- Managing security incidents and performing forensic analysis to determine the root cause of security breaches.
- Collaborating with Red Team members to simulate attacks and test the effectiveness of security measures.
- Providing education and training to employees on security best practices and procedures.
- Staying up-to-date with the latest security trends and technologies to ensure the organization is well-prepared to defend against emerging threats.

TMA - Humana, 📍Ho Chi Minh City (VN) — *DevOps*

📅 Dec 2019 - Jun 2020 👷 Team size: 6

Humana is a health insurance company based in the United States. It offers a range of health insurance products, including Medicare Advantage plans, prescription drug plans, and commercial health insurance plans. My responsible for pulling and parsing customer data, and pushing it to the data warehouse for later analysis.

- Set up and maintained Azure pipeline
- Collected data from various sources and parsed it using Python scripts running in AKS, and automatically pushed the analyzed data to the data warehouse for later analysis.

TMA - Kasikornbank Tech, 📍Thailand — *DevOps*

📅 Mar 2019 - Dec 2019 👷 Team size: 12

Kasikorn Technology Group (Kasikorn Tech) is a technology company based in Thailand. Kasikorn Tech provides a range of technology-related services, including software development, IT infrastructure management, and digital transformation consulting. The DevOps project helped to improve their software development process by apply cloud and automation techniques

- Set up and maintained CI/CD pipeline for product testing with Jenkins Scripted pipeline
- Enabled dynamic slave in Jenkins using shared-library and OpenShift, providing a scalable and efficient solution for managing build nodes.
- Conducted functional tests and deployed testing environments to ensure product quality with Unittest, SonarQube and Jfrog Xray.
- Successfully deployed applications to OpenShift and AWS EKS platforms
- Utilized Python programming language to automate the cleanup process of Artifactory and Docker image repositories, resulting in improved storage usage and performance optimization.
- Enabled Disaster Recovery (DR) with A/B phase on production through Jenkins scripted automation.
- Managed over 1000 machines including IBM, AIX, *Nux, and Windows operating systems.

TMA - Nokia CDN, 📍Ho Chi Minh City (VN) — *DevOps*

📅 Jan 2019 - Mar 2019 👷 Team size: 8

The product empowers network service providers to create their own content delivery network (CDN) for streaming videos by utilizing network intelligence and subscriber data. This allows them to take advantage of the increasing consumer demand for high-quality digital media across all devices. As the DevOps engineer, I will be responsible for developing pipeline that includes building, running tests, and deploying the product to the customer's system.

- Set up and maintain CI/CD to build and deploying the testing environment and conducting functional, performance, and security tests with Jenkins scripted pipeline.

- Utilize OpenStack and Terraform to initialize the infrastructure and install Kubernetes using Ansible
- Monitoring resources using Grafana, Prometheus, and Node Exporter
- Running the testing phase using Robot Framework
- Parsing reports and visualizing data on dashboards with Python script.

TMA - Nokia Network Management, 📍Ho Chi Minh City (VN) — *Junior DevOps*

📅 Jun 2018 - Dec 2018 👷 Team size: 8

The product is a sophisticated web application designed to monitor the performance of multiple vendors and applications. It offers both historical and near-real-time views, covering everything from networks, devices, and servers to VoIP and web traffic, as well as mission-critical applications and network resources. In addition to its monitoring capabilities, the product also supports big data analytics, leveraging technologies such as Hadoop, Impala, Kafka, Kafka Connect, and Apache Kudu. The product was developed using a wide range of technologies, including C/C++, Java, JavaScript, and Python, among others. As the DevOps engineer, I will be responsible for developing a comprehensive pipeline that includes building, running tests, and deploying the product to the customer's artifactory. This pipeline will be designed to enable smooth and efficient integration and deployment of the product.

- Developed a Jenkins Scripted pipeline to enable continuous integration and deployment application to Kuberneties included testing phase.
- migrated from a dedicated server to the cloud. The migration involved moving our applications, data, and services from the dedicated server to a cloud-based platform, which offered greater flexibility, scalability, and cost-effectiveness.
- Proposal and carry out he procedures for the product in customer's system.

TMA - Hoan Vu Lab, 📍Ho Chi Minh City (VN) — *Junior DevOps*

📅 May 2018 - Jul 2018 👷 Team size: 5 (as a Product team)

The product is a IoT and desktop application, that controls a machine used to check food quality on a Windows machine. The application is responsible for setting and getting information from a Zedboard to control the machine and perform the checks. The information gathered is then stored in a server for future viewing, with cloud support to access the data from anywhere. I utilized Jenkins to implement a seamless continuous integration and deployment process for the Java-based application and C/C++ firmware. The pipeline was designed to not only flash the firmware onto the Zedboard but also deploy the Java application as a container with OCI runtime using Docker on the server. The Zedboard was connected to the server through a secure VPN to facilitate smooth data transfer, which could then be effortlessly viewed and analyzed later using the C# desktop application running on the client machine. All the data was stored and processed on the server, which was also originally developed using Java.

- Developed a Jenkins Scripted pipeline to enable continuous integration and deployment of both the application and firmware.
- Responsible for backing up and maintaining the Linux server that hosted both the MySQL server and the server used for processing data from the Zedboard.
- Agile methodology was applied throughout the development process to ensure efficient and effective collaboration between team members
- The flow of continuous integration and continuous deployment (CICD) was controlled using git and Jenkins

[Project] HDvnBits.Org, 📍Can Tho City (VN) — *Fullstack Web PHP Developer*

📅 May 2012 - Dec 2017 👷 Team size: 3

As a fullstack developer and maintainer for HDVnBits.Org, I was responsible for overseeing the development and maintenance of the website. This included working with MySQL and PHP to implement and maintain its functionality as a file sharing service and streaming platform, as well as ensuring its design and user experience met industry standards using Bootstrap. Additionally, I worked to ensure the website was secure and accessible to its large user base, which peaked at 75,000 active users during its heyday.

- Developed website functions with PHP and controlled the version with git.
- Backed up and maintained the server that was running Linux.

[Project] Cara Coffe, 📍Can Tho City (VN) — *IT*

📅 Sep 2011 - May 2013 👷 Team size: 1

Cara was a café with movie serving. I had responsibility for designing networking and cinema system that stored more than 12 TBytes of data (including personal information).

- VPN Site2Site was used to create a private link between subsidiaries.
- Samba file sharing was used for movie serving and syncing files.
- Shellscripts were used to remotely update showtimes for movies and schedule wifi password changes.
- A disaster recovery plan was implemented for the NAS system that used JBOD. In case of a NAS crash, the broken HDD will be replaced and the data will be automatically downloaded from each other.
- The information system and people in the café were managed and operated.

Learning Resource Center, 📍Can Tho City (VN) — *IT Helpdesk*

📅 Sep 2009 - Jul 2013 👷 Team size: >6

LRC at CTU is a library that provides a range of resources and services to cater to the academic and research requirements of its students, faculty, and staff. Along with an extensive collection of books, journals, and multimedia, the LRC offers access to public computers for educational purposes. As part of my role, I was responsible for troubleshooting customers' IT issues and managing computers.

- Support user troubleshooting about wifi, there laptop issue, computers which running Ubuntu
- Have experience installing and replacing hardware that is broken or not functioning properly
- Help to install the server which stored the user infomation.

EDUCATION

Can Tho University, Can Tho City (VN) — *Bachelor of Computer Networks Engineer*

May 2015 - May 2018, Can Tho City

The training program focuses on Computer Systems, Computer Networks, Network security, Big-data and High-performance Computing.

AWARDS AND CERTIFICATES

Cisco Certified Network Association (CCNA) - ISSUED 05-2013 - EXPIRED 2014
Can THo University

Secondrate Branch Open Source - ISSUED 08-12-2017
ACM ICPC 2017