Erik Thorsell

DevOps Transformation Leader | Team Lead | Platform Developer

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Overview

Erik is a solution-oriented DevOps enthusiast, who believes the best way to generate value in a software company is by tearing down walls and helping developers deliver new functionality faster. Erik has worked as Team Lead and Line Manager, being responsible for up to four XFTs spread out over the world, and has also been responsible for developing and maintaining organisation wide CI/CD systems. By leveraging his technical expertise and leadership experience, Erik can assist both with building developer platforms, architectural discussions as well as overarching process changes in your organisation.

Having worked in different industries, including: automotive, telecom, embedded and customs, Erik has experience with a wide range of technologies. He has implemented cloud-based workflows, utilising gitops to deploy Kubernetes applications to both managed and self-hosted clusters; but also with on-premise, air-gapped deployments, requiring self-contained deliverables.

Erik has a proficiency for breaking down complex tasks into manageable chunks. He excels in assignments with unclear and changing requirements, and embraces the agile way of working with iterative improvements. He adapts quickly to new tools and environments and always looks for new ways to shorten the feedback loop.

Experience

Jan '24–*present*

The DevOps Team, Husqvarna Construction Products, Electronics & SW, Jonsered.

Husqvarna Construction manufactures big tools to fulfil your cutting, drilling, sawing and vibrating needs. All of these tools have computers in them, running mission critical embedded software, to help the end user better utilise their equipment.

ROLE

As the sole member of the DevOps Team, Erik is responsible for everything concerning building and shipping the software that is developed at the Electronics & SW department. This includes deploying and maintaining cloud and on-premise infrastructure, writing pipelines and helping developers and testers improve their way of working.

IMPACT

Erik's work is necessary to ensure daily operations. During the assignment Erik has focused on simplifying old, organically grown, processes and emphasised the usage of monitoring across the organisation. He has updated old infrastructure and software to either run on their most up-to-date versions or changed the tooling altogether; always with the purpose to increase the speed of the software lifecycle.

TECHNOLOGIES

Jenkins, Gerrit, AWS, Azure, Azure DevOps, Snyk, SCANOSS, Dependency Track, Python, Bash, Powershell

Dec '22–Dec '23

DevOps Lead and Platform Developer, Toyota Material Handling Logistics Solutions, Gothenburg.

TMHLS develops T-ONE, the software which makes Toyota's forklifts autonomous. T-ONE is a containerised .NET application with an in-house developed workflow engine capable of integrating with warehouse management systems, communicating using OPC UA and HMI.

ROLE

Erik worked in a three-person team, responsible for "developer support". Together with the team, he maintained and improved the developer platform, which spanned both cloud and on-prem resources. He was also responsible for migrating T-ONE from a docker compose deployment to Kubernetes, as well as developing and implementing a new release process, focusing on trunk-based development and automated release candidates.

IMPACT

By migrating T-ONE to Kubernetes, Erik was a key enabler for TMHLS acquiring a large contract. He has also been instrumental to several cost savings w.r.t. cloud usage, bringing static workloads on-premise and utilising cloud resources more efficiently.

TECHNOLOGIES

Azure, Azure DevOps, Docker, Kubernetes, XCP-ng, Ansible, Terraform, pfSense, OpenVPN, Boundary, Ubuntu, RedHat Enterprise Linux, SLES, Windows Server, Python, Bash, Powershell, .NET

Nov '21–Dec '22 **DevOps Transformation Leader**, Maersk Customs Services, Gothenburg.

Maersk (formerly KGH) Customs Services provides customs clearance, booking and global trade consulting services all over the world. They develop and host several SaaS solutions with round-the-clock availability in order to ensure their customers can move their goods to its destination.

ROLE
When KGH was acquired by Maersk, Erik was asked to help them evolve their software suite to a cloud native offering. This included a technical transformation, as well as a change to KGH's way-of-working, where Erik was able to combine his leadership and Kubernetes experience to advice the CTO and architects in their work. After agreeing on a way forward, Erik spent most of his time pair-programming together with the developers; making sure there would be no knowledge gap once the assignment was over. In addition to the transformative work, Erik supported the existing Operations Department with their everyday work, handling deployments, builds of older systems, monitoring, logging, and related tasks.

IMPACT
By the end of the assignment, Erik had led several successful service migrations and helped formulate the plan for migrating KGH's larger and more complex products.

TECHNOLOGIES
Azure, Azure DevOps, Octopus, Kubernetes, IIS, .NET, HA-Proxy

May '19–Nov '21 **Line Manager, Team Facilitator, Software Engineer**, Ericsson (Packet Core), Gothenburg.

The Packet Core department at Ericsson is responsible for the company's 5G portfolio and the SWDP is crucial to ensuring zero downtime upgrades of all components in the 5G stack.

Jun '21–Nov '21 **Line Manager (Acting)**
As acting Line Manager, Erik had the opportunity to work with recruitment, change management, and coaching team members in their careers. He managed around 20 people from different countries and answered to the Packet Core department manager.

IMPACT
Erik successfully helped the XFTs and PO increase their throughput by providing for the teams' needs. With his support, the teams delivered on their commitments and worked in close collaboration with their stakeholders.

Jul '20–Jun '21 **Team Facilitator for DevOps Teams**
As Team Facilitator, Erik was responsible for the performance of four XFTs. He coached the teams in agile principles and helped them perform at their highest level. Being one of the most senior people in the project (see Software Engineer pos. below), Erik was still involved in architectural/design decisions for the product.

IMPACT
Erik's goal was to imbue the DevOps mindset in the project and the developers he worked with. He helped the teams find new ways of working which helped them deliver higher quality software at an increasing pace.

May '19–Jul '20 **Software & CI/CD Engineer**
Erik was one of the first team members to join the Packet Core's Continuous Delivery & Deployment project. The product (SWDP) is a Python application which automates the upgrade procedure of Packet Cores' network functions, ensuring critical telecom infrastructure receive up-to-date software with zero downtime.

IMPACT
Was involved in product design, development as well as testing and developing the build/deployment pipeline for the product. He helped migrate the team from Gerrit to GitLab and utilised Docker Swarm to ensure a readily available build environment.

TECHNOLOGIES
Kubernetes, Python, Jenkins, GitLab, Gerrit, Spinnaker, Confluence, Jira

Jun '18–May '19 **Software & CI/CD Developer**, Volvo Autonomous Solutions, Gothenburg.

Volvo Autonomous Solutions strive to transform the movement of goods through efficient, sustainable and safe autonomous solutions. They deliver a "control tower" for overseeing their autonomous vehicles.

ROLE

During his assignment, Erik worked as a Java developer, scrum master and CI/CD developer. He was part of a team which was tasked with delivering a containerised fleet management system, capable of planning routes and communicating with the autonomous vehicles. Erik also developed and was responsible for the Continuous Integration (CI) tool chain for the Java based products in the project.

IMPACT

The CI/CD platform that Erik developed helped the teams find integration pain points significantly faster than what they had found before.

TECHNOLOGIES

Jenkins, Java SpringBoot, AMQ, BitBucket, SonarQube, Maven, Confluence, Jira, Mattermost

Sep '17–Dec '17 **Machine Learning Engineer**, Machine Intelligence Sweden, Gothenburg.

MIS is founded by two Chalmers alumni with the goal to bridge the gap between AI/ML Research and the industry.

ROLE

Erik worked with the product *Science Router*, a search engine for connecting industry and research. He was involved in all steps of the product design and development but focused primarily on data aggregation and parsing all articles into a unified format, to be stored in AWS and used for algorithm training.

IMPACT

Erik wrote Python scrapers for aggregating research articles from the major scientific publications and format all of the data into a coherent format, suitable for training machine learning models.

TECHNOLOGIES

AWS, Python, LaTeX

Summer 2017 **Platform Developer**, Volvo Cars, Gothenburg.

Was selected to be part of Volvo Cars' Engineering Student Concept (VESC) Programme.

ROLE

As part of the "tools team", Erik helped maintain and develop the in house "Software Factory" which built the software for the propulsion department.

IMPACT

Erik rewrote legacy Jenkins pipelines to be declarative and assisted the team with their automation tasks. He developed an end to end flow for testing arbitrary binaries in HIL rigs as well as an automated way of tagging and publishing these binaries for internal review.

TECHNOLOGIES

Jenkins, SVN, Git, Powershell, Python

Summer 2016 **Intern**, NASA, NVI Inc., Greenbelt, MD.

NVI Inc. is responsible for NASA's VLBI program, which is used to imaging distant cosmic radio sources, spacecraft tracking and other astronomy applications. *(Look it up, it's quite cool.)*

ROLE

During a 10 week internship at Goddard Space Flight Center, Erik developed a Python program which gave researchers in VLBI groups all over the world a new way to calculate slewing models for their antennas.

IMPACT

More accurate slewing models reduces the number of missed observations per antenna. This in turn saves NASA time and money.

Link to work: `https://github.com/ErikThorsell/GSFC_Internship`

TECHNOLOGIES

Fortran, Python, C, VLBI

Tools

Azure 
Erik has some experience with all of the three major CSPs, but has predominantly worked with Azure. He has managed IPsec tunnels, maintained build pools with scale-sets, worked with IAM and RBAC, AKS, databases and VMs; mostly using Terraform but also Microsoft's own tools.

Version Control 
Versioning is imperative to software development and Erik has multiple years of experience working with different tools for versioning both source code and binaries (e.g. GitHub, GitLab, BitBucket, Azure DevOps and gerrit) but he also has experience developing strategies for *how* to version software for different usecases.

Terraform 
In the same way that it's crucial to have build and deployment pipelines to swiftly test and deploy code, Infrastructure as Code is key to enable fast and reliable deployments of *environments*. Erik's IaC tool of choice is Terraform.

Boundary 
Boundary is an excellent tool for managing VPN-like access for organizations. Erik has worked with both Boundary OSS and HCP Boundary and has configured both variants from scratch, in an Azure + on-premise environment.

Packer 
In an environment where virtual machines are regularly deployed, Packer is a great tool to ensure all new VMs have the latest patches and updates. Erik has used Packer to build various Linux distributions as well as Windows server versions, using Ansible in Azure.

Ansible 
TMHLS use Ansible wherever possible; both in combination with Packer for ensuring consistent VM images, but also for on-prem infrastructure deployments. Erik has written Ansible roles for Ubuntu, RHEL, SLES and Windows Server.

Docker 
A central concept within DevOps is self-governance. When teams are able to build and deliver artifacts over which they have full control, they can take full responsibility for their stuff. Erik is a big fan of these ideas and have used Docker for many years to achieve this.

Kubernetes 
Kubernetes gives organisations the possibility to build scaleable – but complex – applications. Erik has experience both with writing YAML manifests to deploy applications in clusters, but also deploying clusters themselves, both in the cloud and on-premise.

Python 
Erik has used Python to solve automation problems for many years. Due to its adoption in the industry and portability, it is an excellent tool for most tasks which require a solution which is poorly handled by a one-liner.

Bash 
Sometimes, Python is not the best choice. Having used both Linux and BSD for many years (and still waiting for *The year of Linux on the desktop*), Erik uses Bash (or any of the common shells) on a daily basis.

DevOps In order to win the marketplace, your company must deliver higher quality software – faster. Making "the speed at which you deliver your high quality product" your highest priority, will force you to scrutinize all parts of your organization. Erik has both the technical and managerial background necessary to help your organization forward; and believes we do so by drawing from the DevOps principles.

Education

Aug '13–Jun '18 

BSc, MSc, MScEng, *Computer Science*, Chalmers University of Technology, Gothenburg.
Erik holds a BSc and an MScEng in Computer Science and Engineering. He also has an MSc in *Computer Science, Algorithms, Languages and Logic* and concentrated his studies to machine learning, artificial intelligence and optimisation.

Aug '11–Jun '12 

Team Training School West (TTS), Dalkarlså Community College, Dalkarlså.
A theological education with emphasis on leadership. Not only did the education cast light upon the complexity that comes with organizing a large community, Erik also got a better understanding of the importance of structuring his everyday work.

Key interests `DevOps | Improvement of Daily Work | Automation | FOSS/Open Source | Transparency Continuous Integration and Deployment | Agile | Continual Learning |`