



FINAL YEAR INTERNSHIP PRESENTATION

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Agenda

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About Company
Technology Used
WorkFlow
Work Done
Learning Aspects
Outcome of the Internship

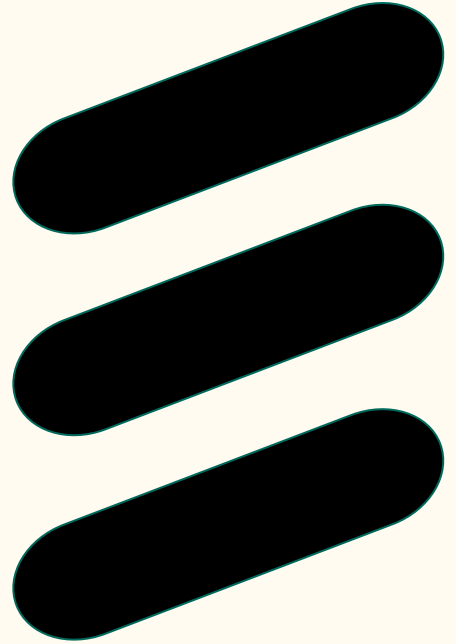
What is my role in the Internship?

Working as a developer(intern) for a deployment automation project at Ericsson Global India Services Pvt. Ltd. Gurgaon.

About The Company

Ericsson, is a Swedish multinational networking and telecommunications company headquartered in Stockholm. The company sells infrastructure, software, and services in information and communications technology for telecommunications service providers and enterprises, including, among others, 3G, 4G, and 5G equipment, and Internet Protocol (IP) and optical transport systems.

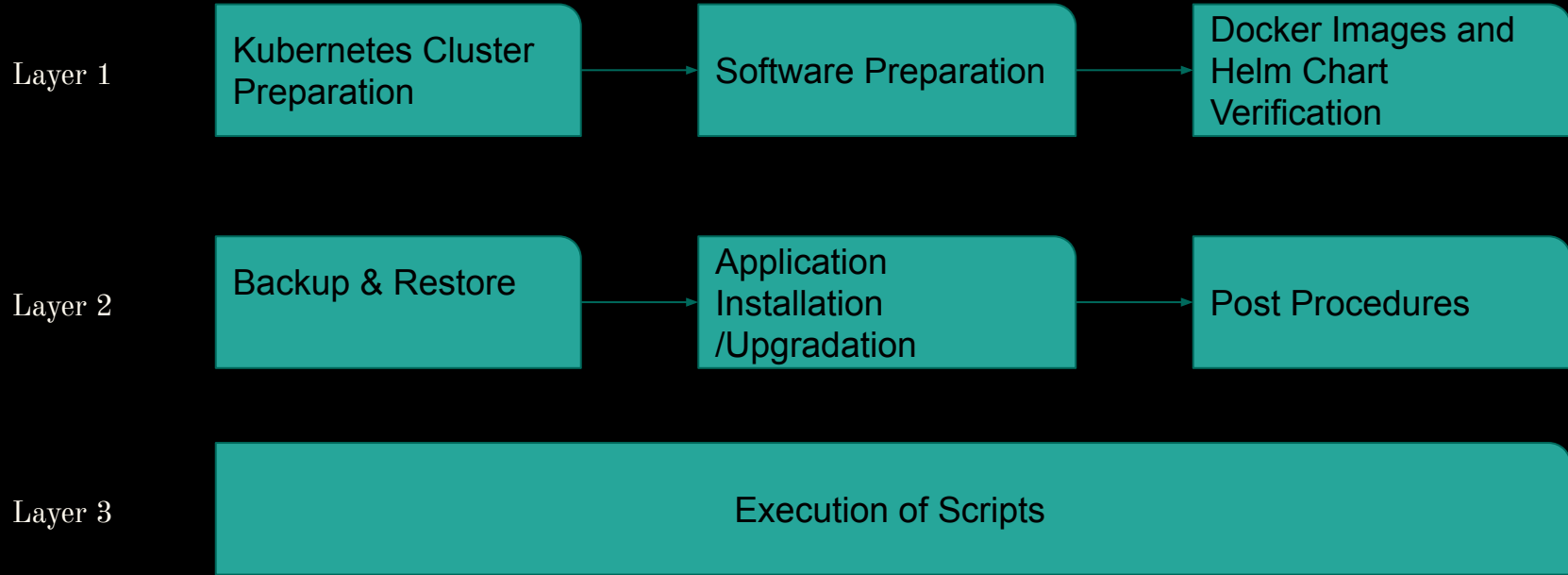
Ericsson's business includes technology research, development, network systems and software development, and running operations for telecom service providers. and software Ericsson offers end-to-end services for all major mobile communication standards.



Technologies Learnt & Used



- Python
- Shell
- Jenkins
- Spinnaker
- Kubernetes
- Helm
- JIRA
- Java
- Robot Framework
- Citrix
- Microsoft Office and Teams



Deployment Automation Workflow

Work Done

- Shell Script development
 - Unpacking Of software
 - Checksum
 - Validation
 - Cleanup
- Python development
 - Logger
 - Request HTTP
 - JSON
 - Regex
 - Robot Framework
 - Pyyaml
 - xml etree
 - sys, os, time
- Backup and Restore of application before deployment
- Deployment pipeline monitoring and feedback
- Configuration as code for Jenkins.
- Build Understanding of Robot Framework for functional testing
- Contributed in library creation for required for Robot Framework Test Cases
- Kubernetes Tasks
 - Cluster Setup
 - Helm Deployment
 - Helm Rollback
 - Kube Config

Work Done Contd.

- Development of Code for Rollback Services of the software
- Presentation to the Mediation Department with end to end execution.
- Debugging and Testing of the Scripts Developed on Jenkins and Spinnaker.
- Code Quality Enhancement
- Feedback Analysis and code correction
- Documentation of Project

Learning Aspects

- Version Controlled tools and code quality aspects for continuous integration of software
- Background of processing engines to create and deploy data workflow
- Continuous Development and Deployment
- Toolbox with interface to support use cases for IOT, 4G and 5G.
- Orchestration and Containerisation
- Python Development
- Corporate culture
- Software as a product

Outcome Of the Internship

- Improve and acquire new skills not only in the technical field but also in the professional field
- Resource estimation, requirements for a software development project
- Ideas, timelines, and estimates that are related directly to technical knowledge are hard to explain to non-technical audiences.
- I gained a solid understanding of different tech stacks, programming languages, and engineering practices, below are some key learnings primarily in the field of Software Development.

Q/A

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References

- <https://docs.python.org/3/>
- <https://spinnaker.io/docs/guides/>
- <https://www.jenkins.io/doc/>
- <https://kubernetes.io/docs/concepts/>
- <https://helm.sh/docs/>
- <https://robotframework.org/robotframework/>
- Ericsson internal documentation