Hi, I am Gangadhar Basireddy and I have completed my graduation from electrical and electronics engineering background in 2011. Overall, I have 10 years professional experience in which I have 3 years’ experience with ACME pvt ltd and Later on I switched to Tech Mahindra, I worked there for past 7 years.

Coming to the technical stacks I have proficiency in DevOps tools (such as: git, maven, Jenkins, Docker, Ansible and Kubernetes) and maintaining the AWS infrastructure which is highly scalable that to with minimal down time.

Coming to the Roles and Responsibilities: My job responsibility mainly involves build, release and deployments in production environment and keeping a track of AWS services.

Project details:

I worked with GE client for past 7 years. GE have various sectors such as GE OIL & GAS, GE Health care, GE Power & Water and GE aviation. Etc. GE Power and GE Renewable energy are trusted partners in the country with strong capabilities in engineering, manufacturing, project management and supply of products and solutions for power generation and transmission infrastructure requirements. About half of all power generated, transmitted, and distributed is through GE’s equipment and software.

**Kubernetes:** Kubernetes is an opensource container orchestration tool, it helpsfor automating deployment, scaling, and management of containerized applications.

**Master Node**: Kube API server, etcd, Controller, Scheduler

**Worker Node**: Kubelet, Kube proxy, Container runtime

**Kubect**l: Kubectl stands for “**Kubernetes Command-line interface**”. It is a command-line tool for the Kubernetes platform to perform API calls.

**Kube API Server:** It is used to validate and configures data for the api objects which includes pods, services, replication controllers and others.

**Etcd**: It is a distributed reliable key-value store used by Kubernetes to store all data used to manage the clusters.

**Controller**:  Controllers are control loops that watch the state of your cluster, then make or request changes where needed.

**Scheduler**: It is a responsible for distributing work or containers across multiple nodes.

**Kubelet**: Kubelet is the primary node agent that runs on each node.

**Container runtime**: It is the underlying framework that is responsible for running application in containers like docker.

**Helm Chart**: Helm is a package manager for Kubernetes that **helps us to manage Kubernetes applications** — Helm Charts help you define, install, and upgrade even the most complex Kubernetes application.

**Kubernetes debugging & Troubleshooting:**

* Image Pull Backoff
* Incorrect Labels and Selectors. ...
* Ignoring Health Checks. ...
* Using the Default Namespace for all Objects. ...
* Using the 'Latest' Tag. ...
* Lack of Monitoring and Logging. ...
* Wrong Container Port Mapped to a Service. ...
* Crashloopbackoff error.

A continuous integration and continuous deployment (CI/CD) pipeline is **a series of steps that must be performed in order to deliver a new version of software**.

**Canary Deployment:**

In software engineering, canary deployment is **the practice of making staged releases**. We roll out a software update to a small part of the users first, so they may test it and provide feedback. Once the change is accepted, the update is rolled out to the rest of the users

A blue/green deployment is **a deployment strategy in which you create two separate, but identical environments**. One environment (blue) is running the current application version and one environment (green) is running the new application version

The most common causes of the “SSL handshake failed” error include:

1. Your local device has the wrong date or time
2. The browser doesn’t support the latest SSL protocol
3. Your SSL certificate is invalid
4. There’s a problem with your [**Server Name Identification (SNI)**](https://www.cloudflare.com/learning/ssl/what-is-sni/) configuration
5. There’s an issue with [**your Content Delivery Network (CDN)**](https://www.elegantthemes.com/blog/tips-tricks/how-to-install-a-cdn-on-your-wordpress-website), such as Cloudflare