Python for Network Programmability

- Relatively easy to learn with many training resources available
- Human readable
- Open source
- Can be installed on all popular operating systems
- Easy to find network automation code samples

Git

- Git is a version control system for tracking changes in source code and files.
- It is typically used for software development but can provide version control for any type of files.
- With most client–server version control systems, the code has to be ‘checked out’ and can only be worked on by one developer at a time.
- Git is a distributed version control system.

Git

- Every Git directory on every computer is a full-fledged repository with complete history and full version-tracking abilities.
- Because of this the code can be worked on by multiple developers at the same time.
- Organizations typically designate one repository as the master copy.

GitHub

- GitHub is a Git repository hosting service which adds many of its own features.
- Repositories can be public or private.
- Repositories can be copied between users.
- Task management tools are available.
- Control mechanisms provide security and resolve conflicts.

CI/CD

- CI is Continuous Integration
- CD is Continuous Delivery or Continuous Deployment
- CI/CD is a set of operating principles and practices that enable application development teams to deliver code changes more frequently and reliably.
- Frequent changes are more efficient than rolling them up into large change windows.
- Automation of building, testing and deployment allows this.
- The implementation is known as the CI/CD pipeline.
- Tools such as Jenkins and Travis CI aid management of the pipeline.