

Ishan Tyagi

Github | Portfolio | LinkedIn
ishanttyagi25@gmail.com | +91-8368496946

EDUCATION

IIIT HYDERABAD

M.TECH IN COMPUTER SCIENCE

Post Grad 2018-20 | Hyderabad, India
CGPA: 7.71/10

KNIT, SULTANPUR

B.TECH IN INFORMATION
TECHNOLOGY

Grad 2013-17 | Sultanpur, India
Percentage: 80%

SKILLS

- C/C++ • Golang • Python
- Docker • Kubernetes • kubeBuilder
- Unit Testing Framework: Ginkgo and Gomega
- AWS (EC2, S3)
- SQL • Bash • Git

COURSEWORK

- Data Structures and Algorithms
- Operating System
- Computer Networks
- Distributed system
- Database system
- Statistical method in AI
- Natural Language Processing

MOOCS

- Machine learning by Stanford University offered through Coursera
- Deep learning by deeplearning.ai offered through Coursera

ACHIEVEMENTS

- **AIR-840** among 107,893 candidates with **99.22** percentile in GATE CS 2018
- Scored **95/100** in both Physics and Chemistry in class 12th
- Secured **2nd** Rank in District Chess championship

WORK EXPERIENCE

SAP LABS, INDIA ASSOCIATE DEVELOPER

July '20 - Present

- Working as Core Developer on OpenSource Project **Gardener: Kubernetes at Scale**
- Contributor and Maintainer of **etcd-backup-restore** and **etcd-druid** (custom controller): control Plane component of Project Gardener.
- Also worked as DoD (Dev on Duty) to resolve Customer issues.
- Mentored the group of interns and help them to get onboard on Project Gardener.

PROJECTS

DISTRIBUTED KEY-VALUE STORE | JAVA

- Developed a distributed system to store key-value with fault tolerance.
- Clients can request GET, PUT or DELETE key. Involved components like master-slave architecture and consistent hashing.
- Multiple clients communicate with a single master server in a JSON messaging format.

RAFT PROTOCOL | GO

- Implemented a replicated log system using RAFT consensus algorithm.
- Involved components like Leader Election and log replication, reliable persistence of states to manage failure.

MINIBIT TORRENT | C++, PTHREAD

- Developed a Peer to Peer multimedia file sharing network.
- Tracker with fault tolerance is implemented which helps in getting a file from multiple available seeders.

THREADPOOL LIBRARY | C++

- Implemented a Generic ThreadPool library, it helps in spawning and destruction of threads.
- Implemented a Multi-Threaded web server using threadPool library.

DYNAMIC LEXICON GENERATION FOR SCENE IMAGES | PYTHON, KERAS

- Generates contextualized lexicons for scene images using only visual information.
- Topic Modelling and deep CNN model are used to generate words that are more likely to appear in a given raw image.

NEURAL MACHINE TRANSLATION | PYTHON, PYTORCH

- Sequence to Sequence Learning with Neural Networks.
- NMT by basic attention model: Jointly Learning To Align And Translate.