Snehan

Software Development Engineer ·

Ranchi, India

(+91) 911-37-94957 | snehan1234567@gmail.com

Work Experience

Cisco Systems   *Bangalore, India*

SOFTWARE DEVELOPMENT ENGINEER (**Full Time**)   *Aug 2021 - Present*

- Part of **Cloud Networking** team. Worked on multiple features of nxos (OS of a network Switches) in n9k, n7k and aci series
- Added EPLD(Erasable Programmable Logic Device) support, upgrade and downgrade of FPGAs for multiple new platforms
- Worked on a python script which fetch latest fpgas file and compile it into nxos image for multiple platforms
- Created a **cli** which fetch information from all the line cards and display on the supervisor command line
- Worked on and learned about an **online diagnostic framework** which monitors and corrects the switch for any faults

Cisco Systems   *Bangalore, India*

SOFTWARE ENGINEER - BACHELOR'S (**Intern**)   *May 2020 - June 2020*

- Designed an algorithm that would **search predefined patterns across log files** in **python**
- The script can execute various operations such as **regex/pattern search, time based search** in log files
- Performance - Searching of patterns across log files of size in few hundred MBs could be done in couple of seconds
- **Received Pre-Placement Offer**

Summer of Code by Nutanix and Gov. of U.P.   *Kanpur, India*

FULL STACK DEVELOPER **PHP,MySQL,JS**   *May 2018 - July 2018*

- Actively Contributed as a Full Stack Developer with a team to build a web app aimed at suggesting users, educational videos
- Implemented a **recommendation system** based on **collaborative filtering** model using python on the server side
- Designed a website which **takes input such as ratings, interests, likes by users,** which is stored in a MySQL database
- Tuned dependent factors such as time, length hardness for videos at each instance of reviews

Educational Qualifications

B.Tech CSE	2021	Indian Institute of Technology, Kanpur	8.2/10
CBSE XII	2017	Delhi Public School, Ranchi	93.4%
CBSE X	2015	DAV Public School, Ranchi	10.0/10.0

Course Projects

Implementing modified FastTrack and Concurrent Data Structures   *IIT kanpur*

ANALYSIS OF CONCURRENT PROGRAMS, COURSE ASSIGNMENTS   *Jan,2021 - May,2021*

- Implemented sampling support, schedule steering and perturbation in race detector tool FastTrack
- Implemented concurrent data structure such as **lock-free MS Queue** and a **non-blocking** version of hash table

Simulated an Inverted-Pendulumn - a CPS System   *IIT kanpur*

EMBEDDED AND CYBER-PHYSICAL SYSTEMS, COURSE PROJECT   *Sep,2020 - Dec,2020*

- Simulated stabilising of an inverted pendulum, a cyber-physical system, on low power multi-hop network on simulink
- Experimented with the simulated system by varying jitter, delay, phase in the signal to the actuators

Machine Learning   *IIT kanpur*

RECOMMENDATION SYSTEM & DECAPTCHA, COURSE ASSIGNMENTS   *Aug,2019 - Nov,2019*

- Made a **recommendation system** (multi-label classification) using a **tree+ classifier** for prediction and beam search (Bonsai)
- Build a **CNN model using keras and tensorflow** libraries to identify the characters in a given Captcha
- Model consists of 2 hidden layers, 1 input layer containing 10,000 input nodes and 1 output layer containing 26 output nodes
- Used "ReLu" and "softmax" as activation function in the hidden layers

Android App   *IIT kanpur*

COMPUTING LABORATORY, COURSE ASSIGNMENTS   *Aug,2019 - Nov,2019*

- Built a native application using **react native, mongoDB and Nodejs** where user can signup and share there thoughts

Skills And Scholarships

Programming	C++, Python, BASH, JavaScript, C, Java
Web	PHP, MySQL, MongoDB, MERN, HTML
Scholarships	NTSE, KVPY