Shailendra Kumar Gupta

gupta.shailendra0503@gmail.com | linkedIn/Shailendra53 | github/Shailendra53 | https://shailendra53.github.io/

EDUCATION

Bachelor of Technology in Computer Science and Engineering   Punjab, India | July 2016 - June 2020
Indian Institute of Technology (IIT) Ropar

PUBLICATIONS

AN END-TO-END FRAMEWORK FOR DYNAMIC CRIME PROFILING OF PLACES
Authors: Shailendra Kumar Gupta, Shreyanshu Shekhar, Neeraj Goel, Mukesh Kumar Saini

- Accepted as a Book Chapter in the Book 'Smart Cities: Concept, Practices, and Applications' (CRC Press, Taylor and Francis Group)
- Developed an automatic framework to estimate crime score of locations using online news articles
- Used Natural Language Toolkit(NLTK) and Stanford CoreNLP tool to extract relevant information like crime type, crime severity, location information, etc. from news articles
- Created Web Interface to look over crime score of various locations, and heat-map to visualize crime density of locations in India

WORK EXPERIENCE

COMMVAULT SYSTEM INC. | Software Engineer   Bengaluru, India | July 2020 – Present

- Member of **Windows File System** team
- Gained good knowledge of Windows Operating System and Windows Internal tools
- Understood various backup and recovery concepts we use at Commvault for data protection and management
- Contributed to Scan, Backup, Restore and Distributed Framework code modules for both internal and customer issues
- Currently working on Content Indexing project module to enhance the scalability, and stabilize the feature on both Windows and Unix platforms

ARISTA NETWORKS INC. | Software Developer Intern   Bengaluru, India | May 2019 – July 2019

- Deployment of vEOS routers on Google Cloud Platform(GCP) and integration with Arista Auto-test Framework
- Setting up the required topology using vEOS routers deployed on GCP
- Automation of packet forwarding performance test using Pkt-gen, a tool for generating high-speed packets

SANFOUNDRY | Content Developer Intern | Jan 2019 – Mar. 2019

- Read the book 'The C++ Programming Language' by Bjarne Stroustrup and contributed 1000 C++ questions.
- Major topics include Pointers and References, OOPs concept, lambda expression, STLs.

PROJECTS

CHATBOT   With Dr. Shashi Shekhar Jha

- Built a conversational chat-bot using Sequence to Sequence model with Teacher forcing method
- Implemented bucketing method and Attention Mechanism to rightly weigh the important words in the user input
- Used reinforcement learning to improve the accuracy of the model

HUMAN ACTION RECOGNITION   With Dr. Abhinav Dhall

- Action recognition using star skeleton method
- Body contour detection using edge detection methods and selection of 5 extreme points of human contour for star skeleton construction
- Collection of star skeleton series for a particular human motion
- Trained Recurrent Neural Network model on series of star skeleton data

2D TO 3D IMAGE CONVERSION USING SINGLE IMAGE

- 3D image reconstruction using foreground and depth map of image
- Extraction of foreground image using semi-automatic method
- Used Graph cut algorithm for foreground extraction
- Concept of vanishing point and relative height depth cue is used for preparing the depth map of images

TEACHING SKILLS

TEACHING ASSISTANT AT IIT ROPAR

- **Course:** Introduction to Computing and Data Structures (GE103)
- Duties were to conduct lab sessions, clarify their doubts and, grade students based on their performance in labs and assignments

SKILLS

Languages: C, C++, Python, Java, SQL
Technology: NLTK, Stanford CoreNLP, Windows Internal Tools, Django, Flask, Git, GCP, LaTeX, Matlab

EXTRA CURRICULAR ACTIVITIES

- **Coding Club coordinator for the AY 2017-18:** Conducted various informative sessions for students on competitive and general programming
- **Core member of Dance club during first year:** Represented IIT Ropar at cultural fest of IIT Mandi, Exodia
- **Member of Anchoring team during first year:** Hosted events during the cultural fest of IIT Ropar, Zeitgeist