

NISHANT PRAJAPATI

Undergraduate

Department of Computer Science and Engineering

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EDUCATIONAL QUALIFICATIONS

Year	Degree	Institution(Board)	CGPA/%
July'16 – June'21 (expected)	B.Tech + M.Tech (Dual Degree)	National Institute of Technology Rourkela	8.27*/10.0
2016	ISC – XII	MRS. K.M.P.M. Inter college (JAC Board)	86.8%
2014	Matriculation – X	Patna Doon Public school (CBSE)	9.4/10.0

PROJECTS

Voice Recognition Based Security System using Machine Learning

Aug 2018 - Nov 2018

- Created a voice recognition system where user can utter a word and set as a password.
- Different voice samples are collected and processed by Librosa library in python and stored in computer using .wav format.
- In pre-processing stage, MFCC feature selection is used to extract feature from input audio signal.
- In training phase this dataset is passed through neural network, having one input, one output and three hidden layers.
- At final, different voice sample is tested through neural network model and promising accuracy is recorded.

Activities Recommender system

Jan 2019 - Apr 2019

- Content-based recommender system for articles are created.
- Dataset is collected by performing web scrapping on geeksforgeeks website and different information like tags, title name, difficulty are extracted.
- Created a sparse matrix having each cell represent number of times a particular tag is occurred, using CountVectorize in python.
- Using Cosine similarities, similarity between each pair of article is found and recommended.

Kharagpur Winter Of Code

Open source project

Dec 2018

- Worked on open source project named "MESSIAH".
- Web-app which predict disaster based on previously trained dataset and also locate relief point.
- Implemented a system where a person can add mobile numbers of their friends and families and send messages, front-end is done using Flask.

Nitrutsav-18 website

Feb 2018

- Worked with web-development team on our cultural fest website.
- Created a login and sign-up page using HTML and CSS.

HONORS AND ACHIEVEMENTS

- ACM ICPC, Participated in ICPC Asia Amritapuri on-site regional contest 2019-20.
- Coursera, Completed Machine learning course authorized by Stanford University.
- Udemy, Flask Bootcamp>Create Websites using Flask.
- Udemy, Completed Python Bootcamp
- CSE (IS), branch topper in 1st year

RELEVANT COURSEWORK

Data Structures	Algorithm	Machine Learning	Intrusion Detection System
Discrete Mathematics	Operating Systems	Database Management System	Computer Networks

WORK EXPERIENCE

Summer internship at IIT Bhubaneswar

Research Intern

May 2019 - Jun 2019

- Applied Benford's law to create an Intrusion detection system.
- Used NSL-KDD dataset and flow size difference has been done on all TCP flow.
- Implement linear regression to differentiate between normal and malicious flow.

Intern at IIT Bhubaneswar

Research Intern

May 2018 - Jun 2018

- Applied Adversarial attack on pre-created model of IDS using cleverhans library in python.
- Using auto-encoder neural network, create noise free dataset, and regain its accuracy.

PUBLICATION

- IEEE COMSNETS 2020** : A Lightweight Intrusion Detection System using Benford's law and Network Flow Size Difference.

POSITIONS OF RESPONSIBILITY

Literary and cultural Society

Web team

Feb 2018

- I along with my team managed the website and database whole throughout the fest.

Technical Society

coordinator

Nov 2017

- I worked as a Coordinator in Emergency and security team in our technical fest. I also participated in some events.

SKILLS

General Programming: C++, C, python

Databases: SQL

Operating System: Windows, Linux

Frameworks: Flask, jQuery, PHP, Prolog, Pandas, Numpy, Keras, Cleverhans, Librosa, PyAudio

Other softwares: XAMPP, Code block, Jupyter notebook, Git, L^AT_EX

MISCELLANEOUS

- Secure 702 out of 6731 position in Week of code 38 in hackerrank coding platform.
- Actively participate in codeforces, codechef contest.
- District topper of Intermediate science in 12th class.
- Won science exhibition, painting, essay writing competitions at school level.