SANJEEV ROKA

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in Sanjeev-LinkedIn

EDUCATION

Ph.D. in Computer Science (Expected Graduation: 2025), Howard University, Washington DC

Jan 2022 - present

- Advisor: Dr. Danda B. Rawat Specialization in Machine Learning and Artificial Intelligence
- Relevant Coursework: Advanced Operating Systems, Computer Architecture, Advanced Algorithms, Computability, and Complexity,

Bachelor of Science in Computer Science and Information Technology, Tribhuvan University, Nepal

2015 - 2019

GPA 3.67 (World Education Services Evaluated) with Relevant Courseworks

EXPERIENCES

Research Assistant at Center of Excellence in AI/ML - Howard University

January 2022 - Present

- Working on tweet credibility evaluation with transfer learning in NLP and web scraping
- Work on fine-tuning transformer models on different datasets for different use cases

Software Engineer, Berrybytes

Feb 2020 - Dec 2021

- R&D for the development of the Applicant Filtering System with standard ML Pipeline
- Worked to build filtering models and experimented with different embedding models such as Tf-If, word2vec, BERT, etc.

Python Instructor, Logic Institute

Nov 2019 - Mar 2020

• Provided basic and intermediate level courses on python programming and basics of Django

Software Developer Intern, Leapfrog Pvt. Ltd.

Dec 2019 - Feb 2020

- Worked on developing a web-based system from scratch
- Practiced the basics of data structures and algorithms with python and JavaScript

Software Developer Intern, Vzeal Technology

May 2019 - Nov 2019

- Object-Oriented Programming concepts and their implementations.
- Involved in R&D of IoT devices specifically to control the electrical appliances remotely

RESEARCH EXPERIENCES

Research Work: - "Tweet Credibility using semantic similarity with sentence transformer model"

- Developed a system that assigns credibility to the tweets based on the semantic similarity to the news obtained from popular news sites.
- Fine-tuned sentence transformer model using the Twitter URL dataset fine-tuned to gain 80%.

Project Work: - "Duplicate Question Detection"

- Built a system that helps to identify duplicate questions from the pool of questions.
- Used the random forest algorithm with a Gini index for binary classification that is fed with several features extracted from the given text to make the decision.

Project Work: - "Movie Recommendation System"

- Developed a system that recommends movies based on several features Content-based recommendation
- Implemented the KNN algorithm to find the K- nearest movies for a recommendation.

TECHNICAL SKILLS

- Programming Languages: Python, C++, JavaScript (C, Java, Ruby)
- Frameworks and Libraries: Django, Node, NumPy, pandas, NLTK, Sentence Transformer
- Databases MySQL, PostgreSQL, MongoDB

ACHIEVEMENTS AND CERTIFICATIONS

Certificate of Competency- Deep Learning Institute on September 19, 2022

Building Transformer-Based Natural Language Processing Applications from NVIDIA

Winner of Intra-college Hackathon organized at Asian School of Management and Technology

- Developed an IOT device using Arduino board <u>Overview</u>
- Built a system that would automatically control the water motor based on the water level in the tank

Acknowledgment for the "Train Nepal to ICT development" campaign

- Led the campaign, along with 3 other members in the rural village of Rasuwa district, to promote IT, cybersecurity, and its importance.
- Organized a Bootcamp stating the importance of technology as well as trained them in some basics of networking.

RELEVANT COURSEWORK

Probability and Statistics, Calculus and Analytic Geometry, Discrete Structures, Linear Algebra, Object-Oriented Programming Language, Operating System, Numerical Method, Theory of computation, Computer Graphics, Introduction to Cognitive Science, Artificial Intelligence, Software Engineering, Compiler Design, and Construction, Real-Time System, Advanced Database Management, Advanced Java Programming, Database Administration