Sujata Adhikari

EDUCATION

University School of Information and Communication Technology (GGSPIU)

Aug. 2016 - Oct 2020

Bachelor of Technology in Computer Science Engineering

Delhi, India

- Electives: Soft Computing (A), Artificial Intelligence (A+)
- Major Thesis: Routing in IoT with Fuzzy Logic using CupCarbon Simulator

RESEARCH EXPERIENCE

Department of Computer Science, USICT

2019-2020

Undergraduate, Advisor: Dr. Rahul Johari

Delhi, India

Topic: Routing Protocols in IoT Network

- · Comprehensively reviewed Internet of Things (IoT) routing protocols, focusing on energy efficiency, scalability and their optimization.
- Researched various network simulators, exploring their advantages and disadvantages, and actively contributed to the development of the CupCarbon simulator.
- Focused on enhancing the D-LPCN (Distributed Least Polar-Angle Connected Node) algorithm by integrating fuzzy logic. Initially designed for identifying boundary nodes within a network.
- Leveraged fuzzy logic to enable the selection of the most optimal node for information transmission.

PUBLICATION and PRESENTATION

Publication

• R. Johari and S. Adhikari, "Routing in IoT Network using CupCarbon Simulator," 2020 7th International Conference on Signal Processing and Integrated Networks (SPIN), Noida, India, 2020, pp. 301306,doi:10.1109/SPIN48934.2020.9071227.

• 7th International Conference on Signal Processing and Integrated Networks (SPIN-2020) in Routing in IoT Network using CupCarbon Simulator.

PROFESSIONAL EXPERIENCE

United Nations Sep 2023 - Oct 2013

Data Annotator

Remote

- Volunteered in a UN sustainable development mission, working towards global progress and sustainability goals.
- Collaborated with a data analytics team dedicated to supporting initiatives for the preservation and well-being of marine life and underwater ecosystems.
- Accurately categorized and labeled over 500 diverse datasets.

TATA CONSULTANCY SERVICES-Cargill

April 2022 - Sep 2023

Network Engineer-Europe Region

Pune. India

- In just one month, efficiently eliminated a three-month backlog, this enhanced implementation efficiency and led to a reduction in client issues.
- Achieved a 30% reduction in device compliance issues within our tools and consistently maintained a high level of compliance, earning recognition as the primary point of contact for resolving tool-related issues.
- Collaborated with cross-functional teams to successfully implement various wireless upgrades, including controllers and wireless access points.
- Solely managed Networking Tools for the region, and enhanced team efficiency through streamlined operational approvals.

TATA CONSULTANCY SERVICES-Cargill

Feb 2021 - April 2022

Network Engineer-North America Region

Pune, India

- Tailored project plans to align with customer requirements and devised network design and implementation strategies.
- Effectively oversaw implementation approvals, resulting in a significant reduction in implementation issues.
- Successfully maintained multiple tools, resulting in a notable decrease in device-related issues.
- Conducted comprehensive training sessions for new employees on networking tools and facilitated data collection for the replacement of outdated devices.

SKILLS

- **Programming Languages**: C and C++, Python, HTML, CSS, SQL, Python Libraries-Pandas, NumPy, Scikit-learn, Tensorflow, Matplotlib, Langchain, OpenAI.
- Software Skills: Juypter Notebook, Microsoft PowerBi, office360, GitHub and Git, Vscode, Google Colab, Cupcarbon
- Languages: Nepali(Native), English(Fluent), Hindi(Fluent), French(Basic)
- Other: Statistics, Routing Protocols-TCP/UDP, Machine Learning, IoT, DBMS, Data Analysis, Research Skills, Routers, Switches, SD-WAN, Firewall upgrade, Network monitoring Tools

LEADERSHIP and SERVICE

Mess Committee Member | Satpura Girls Hostel, GGSIPU

2017-2019

- Saved up to 20% on mess budgets with menu optimization and cost-saving recipes and reduce food waste by 30%.
- Facilitated a series of engaging hostel events, including Fresher Parties and a heartwarming Diwali celebration that
 fostered community and cultural understanding.
- Safeguarded student funds and ensured responsible budgetary management by implementing twice-yearly mess bill
 audits.

Organizer and Member | International student office, GGSIPU

2018 - 2020

- Organized and hosted cultural events for two consecutive years, showcasing diverse traditions through plays, music, and
 dance performances connecting over 100 students and fostering a vibrant campus community.
- Championed inclusivity by creating a welcoming space for student meetings, fostering diverse connections and collaborations across campus.
- Managed data collection for a multi-university study on international students, and helped international affair reach more students.

Member and Presenter | WOSY-World Organization for Student and Youth

2017-2019

- As a dedicated member of the WOSY Delhi chapter, I enthusiastically engaged in a multitude of meetings and events.
- Delivered a compelling presentation on the remarkable women of Nepal, commemorating International Women's Day with insights and appreciation.

PROJECTS

$\textbf{Potato Disease Classification} \mid \textit{Numpy, Pandas, TensorFlow, CNN, Jupiter Notebook}$

 \mathbf{Link}

- Inspired working alongside my mother in our kitchen garden When our home-grown potatoes began to show signs of disease.
- An image classification machine learning project showcasing Convolutional Neural Networks (CNNs) for accurate and efficient image recognition.
- Predicted potato diseases based on their leaf images, achieving a test accuracy rate of 80%.

Finance analyst | langchain, OpenAi, LLM, Google Collab

Link

- An intuitive news research tool simplifying information retrieval.
- Users input article URLs and ask questions to gain insightful stock market and financial domain analysis effortlessly.
- Process article content through LangChain's UnstructuredURL Loader.

Market Sales Analysis | Microsoft PowerBI, Excel, Data Analysis

 \mathbf{Link}

- An in-depth data analysis project utilizing market sales data.
- Conducted a comprehensive analysis of sales data, including country-wise insights, weekly trends, and revenue compared to target performance.
- Designed interactive dashboards for product and sales data.

GRANTS and AWARDS

- Research Grant: Awarded Rs 8000 for my research publication by USICT.
- Organizer Award : Honored by the International Student Office for the successful organization of international student meets for two consecutive years.
- Yoga Competition: I achieved the 2nd position in an inter-college yoga competition, showcasing my dedication and skills and competing nationally.

REFERENCES

• Dr. Rahul Johari : Associate Professor-USICT-GGSIPU

Email: rahul@ipu.ac.in

• Dr. Amit Prakash Singh : Professor-USICT-GGSIPU

Email: amit@ipu.ac.in

• Mr. Alex Abreu : Network Lead-Cargill, TCS

Email: alex.abreu@tcs.com