GUNVEEN KAUR BATRA

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EDUCATION

2022 - present: **MS in Computer Science from New Jersey Institute of Technology** (Expected graduation: December, 2023) (GPA: 4.0/4.0)
2017 - 2021: **BTech in Computer and Communication Engineering from Manipal Institute of Technology** (Minor: Big Data) (CGPA: 3.51/4.0)

EMPLOYMENT

January, 2023 – May, 2023: Graduate Teaching Assistant for Internet and Higher Layer Protocols subject *New Jersey Institute of Technology, NJ, USA*
- Assisted in grading 7+ assignments and quizzes based on the Wireshark network protocol analyzer
- Mentored a core of 60 students in a virtual setting
- Closely collaborated with the professor to design a socket programming project to implement a game of strategy

August, 2021 – August, 2022: Risk Analyst at Cisco Systems Private Limited *Bangalore, Karnataka, India*
- Identified, evaluated and mitigated IT risks to protect the company and its assets from financial misstatement
- Tested >50 IT applications and IT infrastructure controls to ensure compliance to SOx
- Automated mundane SharePoint data access using Cisco proprietary chatbot development framework to improve response time by more than 50%

RESEARCH AND PUBLICATIONS

'Performance Comparison of Randomized Local Search, (1+1)-Evolutionary Algorithm and Genetic Algorithm for Graph Isomorphism Problem using Permutation Matrix Search Space', Engineering Letters (IAENG)
Work done: Performed parameter optimization and tested RLS, EA & GA algorithms for the graph isomorphism problem using the permutation matrix search space

'Trust based resolving of conflicts for collaborative data sharing in Online Social Networks', LNNS volume 490, Springer. Presented this research project at the 3rd International Conference on Emerging Technologies In Data Mining and Information Security (IEMIS 2022) organized by Department of Computer Application and Sciences, Institute of Engineering and Management, West Bengal State, India in February, 2022
Award conferred: '**Best Paper Award' at IEMIS, 2022**
Work done: Data mining from Twitter using RapidMiner tool, data cleaning and preprocessing, user interest detection from tweets using classifiers (k-NN,SVM, Naïve Bayes, Random Forest, Fuzzy C-Means, etc.)

TRAINING AND INTERNSHIPS

February 2021 – July 2021: Technical Graduate Intern at Cisco Systems Private Limited
Description: Release management process optimization and improving efficiency through automation of information-based queries (worked in a cross- functional agile scrum team)
Technologies used: Cisco proprietary chatbot development framework, Microsoft adaptive cards, Postman for APIs and Python language

May 2020 – September 2020: Artificial Intelligence Intern, B-Aegis Life Sciences and Research
Description: Developed 'PneumoSense', an interactive Covid'19 screening app by assessing a real-time audio stream of cough sounds *Technologies used:* Python language (Libraries: Librosa, Pandas, Numpy, Keras, TensorFlow, Scikit-Learn, Flask), Microsoft Azure for deployment *Implemented:* Sequential CNN model using Mel-Frequency Cepstral Coefficients (MFCCs) as selected features for the model

June 2020 – July 2020: Data Analytics Intern, 7X Ventures (BlitzJobs)
Description: Assess client potential for the organization
Technologies used: Python language (Libraries: TextBlob, Imbalanced-Learn)
Implemented: TextBlob sentiment analysis, correlation analysis & feature importance, Synthetic Minority Oversampling Technique (SMOTE) to increasecases in the dataset before applying the logistic regression model

ACADEMIC PROJECTS

Mobile Handset Recommendation System
- Implemented k-NN algorithm to find best match of mobile phones based on descriptive parameters
- Used Flask to create a UI

TECHNICAL SKILLS

Languages: Python, R, Java, C++, C
Web: HTML, CSS, JavaScript
Database & Cloud: MySQL, Amazon Web Services, Microsoft Azure
Development tools: Anaconda (Spyder, Jupyter Notebook), VS Code, RStudio, PyCharm, Atom, RapidMiner, Android Studio, Notepad++, Cisco Packet Tracer

CERTIFICATIONS

08/2023: **TensorFlow Developer Certificate in 2023, Zero to Mastery**
Credential ID: UC-326fd4d5-a03a-45b3-a4cd-e35c0dab678a
Skills:
- Deep Learning with TensorFlow 2.x
- Neural Network Architectures (CNNs, RNNs, etc.)
- Model Training and Optimization
- Transfer Learning and Fine-Tuning
- Hyperparameter Tuning
- Model Evaluation and Metrics
- TensorBoard for Visualization
- Deploying TensorFlow Models

03/2020: **Big Data Specialization by University of California, San Diego**