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WORK EXPERIENCE

Software Engineer Intern, Motorola Solutions Inc.   (3 months) *May'22 - Aug'22*

○ Implemented a CLI based System Analyser for **FLEX** (Computer Aided Dispatch) Software to monitor usages and configuration changes at client end, and enabled the business to plan crucial timely upgrades and bug fixes for the software to enhance productivity.   [Java, JUnit, Mockito, PowerMockito]

○ Designed and developed a FLEX Configuration Service to track overtime changes in configurations at different client sides in the form of versioned snapshots, compare configurations, and restore back earlier configurations as per requirements. [C#, .NET, MongoDB, ActiveMQ]

○ Built a web based application to view and compare category wise configurations for different clients and versions in an efficient and structured way using service end points.   [React.js]

Graduate Teaching Assistant, University of Utah   *Aug'21 - Present*

○ Reviewed codes and projects, graded and guided a cohort of **126** students in Graduate courses namely, Mobile Application Development, Introduction to Software Development, and Data Structures and Algorithms.   [Java, Android]

Programmer Analyst, Cognizant   (11 months) *Sep'20 - Jul'21*

○ Designed and developed monthly and quarterly Healthcare system reports for **Blue Cross and Blue Shield of Minnesota**   [Teradata, SSRS, WherScape Red]

○ Automated the timely generation of over **100** reports along with their sub reports using Subscription queries.[PowerBI]

Research Intern, Jadavpur University   (2 months) *Dec'18 - Jan'19*

○ Implemented various wrapper-based algorithms and developed a **Harmony Search** based technique for the feature selection for generic classification models.   [MATLAB, Python]

○ Selected relevant features, augmented the Classification Accuracy upto **98.99%** using meta-heuristic algorithms and reduced the model building time by factor of **4**.   [Scikit learn]

EDUCATION

Master of Science (MS), Computer Science   *Aug'21 - May'23* (Expected)
The University of Utah, Salt Lake City, UT   GPA: 4.0/4.0

Bachelor of Technology (B. Tech), Computer Science & Engineering   *Jul'16 - Jun'20*
Maulana Abul Kalam Azad University of Technology, India   GPA: 9.48/10

RELEVANT PROJECTS

A Bi-stage Feature Selection Approach for COVID-19 Prediction using Chest CT images   *Sep'20 - Oct'20*

○ Proposed a bi-modular hybrid model to detect COVID-19 from chest CT images.   [TensorFlow-Keras]

○ Trained a convolutional neural network model using CT images and extracted features from the model.

○ Incorporated ensemble of two filter methods namely Mutual Information and ReliefF for initial screening of features and applied wrapper-based Dragonfly Algorithm for further selection of relevant features. Tested the Model on two open access databases namely SARS-CoV-2 CT images and COVID-CT datasets and attained Prediction Rates of **98.39%** and **90.0%** respectively.✂   [Python, scikit-learn]

Feature selection for Facial Emotion Recognition using Cosine Similarity based Harmony Search Algorithm
Jan'20 - Mar'20

○ Proposed a feature selection technique called Supervised Filter Harmony Search Algorithm based on Cosine Similarity and minimal redundancy maximal relevance concept using Pearson's Correlation Coefficient.

○ Considered 5 feature descriptors including uniform local binary pattern, horizontal-vertical neighborhood local binary pattern, Gabor filters, histogram of oriented gradients and pyramidal histogram of oriented gradients for Feature extraction. Tested the model on two benchmark facial emotion recognition datasets, namely the Radboud faces databaseand the Japanese female facial expression.   [MATLAB]

○ Achieved highest Classification Accuracy of **97.79%**, Precision of **98.6%**, Recall of **97.8%**, and F-measure of **98.19%**.✂

SKILLS

Application Areas	Software Engineering, Business Intelligence, Applied Machine Learning, Feature Selection
Languages	Java, C, C#, JavaScript, HTML/CSS, Python, MATLAB
Frameworks	.NET, JUnit, Mockito, PowerMockito, Moq, React.js, Scikit learn, NLTK, SpaCy
Coursework	Advanced Algorithms, Operating Systems, Data Structures, Principles of Computer Programming, Object Oriented Programming, DBMS, Computer Networks, Theory of Computation