TANYA A

233 Taylor Ave N, Seattle, Washington, 98109| tanya961211@gmail.com | 480-803-7244

EDUCATIONs

Master of Science, Computer Science **August 2021 - May 2023**
Arizona State University, Tempe, AZ
Bachelor of Technology, Software Engineering **July 2014 - May 2018**
SRM Institute of Science and Technology, Chennai, India

TECHNICAL SKILLS

- **Programming Languages** : Python3, Java, MATLAB, Clingo
- **Databases** : NoSQL , SQL, MySQL, SQLite, ORACLE, SAP SYBASE, TERADATA
- **Cloud Platforms** : Amazon Web Services(S3,DynamoDB, SageMaker, Code Commit, Code Whisper, EC2,lambda)
- **Web Technologies** : RESTful API,JavaScript, AngularJS, HTML5, CSS3, XML, SOAP Services
- **Libraries/Frameworks** : TensorFlow, Scikit-learn, Pytorch, LLM, Pandas, NodeJS, Numpy, Flask, Kubernetes, Docker
- **General Software Tools/IDE** : Eclipse, Visual Studio, Net Beans, Android Studio, PyCharm, Git, LabelBox, Google Charts

PROFESSIONAL EXPERIENCE

Full Stack Engineer II – GEICO, Washington, USA **June 2024 – Present**

- Collaborated with a cross-functional team to develop and implement a new partner integration platform, enabling GEICO partners to seamlessly onboard, generate quotes, and bind new users with diverse requirements.
- Played a key role in designing and architecting the onboarding process, ensuring scalability, flexibility, and robustness.
- Utilized Agile methodologies to streamline development processes, resulting in efficient project management, timely delivery of features, and continuous enhancement of platform capabilities.

Software Engineer– Fluke Corporation, Washington, USA **June 2023 – December 2023**

- Developed a web application to enable Fluke's customers to maintain their equipment using predictive fault monitoring, using real-time thermal images captured by a thermal camera.
- Leveraged AWS services (AWS Code Commit, AWS S3, Sagemaker) for secure version control and cloud-based data storage, while utilizing Flask, JavaScript, and SQLite for app development.
- Leveraged ML/AI to train the YOLOV8 model using customized hyper-parameters, used to perform auto analysis on different styles of Electric panels.
- Capitalized Labelbox, a robust annotation tool, for image annotations and model improvement
- Evaluated model performance using metrics like the confusion matrix, precision-recall (PR) curve, and training time analysis, ensuring optimal results.**Recall** of 0.98 and **Precision** of 0.99 on test data.

Software Engineer – Larsen and Toubro Infotech, Chennai, India **Aug 2018 – July 2021**

- Designed a solution for **Citi Bank**'s Data Mart for sourcing data from multiple OLTP databases like Oracle & Sybase.
- Implemented the application's User Interface for building & sharing custom reports using Java Swings, and JavaMail API.
- Designed a database comparison system to identify data quality gaps using count and checksum validation.
- Implemented an end-to-end testing framework, utilizing NodeJS, JUnit, Selenium WebDriver, TestNG & QTP, to enhance system reliability through thorough sanity, smoke, and regression testing for the Emirates Gas website.
- **Agile Experience** – Acted as a scrum lead and spearheaded the team's agile scrum practices

PUBLICATIONS & CERTIFICATIONS

- Randomised Traffic Path Analysis and Formation for Detecting Distributed Denial of Service Botnet Attacks **July 2019**
  (International Journal of Recent Technology and Engineering)
- Certified Tester Foundation Level (International Software Testing Qualifications Board) **Sept 2018**
- Certification in Core Java (Hewlett Packard Education Services) **July 2017**

ACADEMIC PROJECTS

Image Feature Extraction and Similarity Measurement (Python, Dimensionality Reduction, Classification)

- Extracted features including Color moments, Local Binary Patterns, and histogram-oriented Gradients for grayscale image datasets, computing top K-Latent semantics for each feature model.
- Collaborated in a group to implement dimensionality reduction techniques such as PCA, SVD, and K-means for computing similarity matrices using ASCOS++ and Personalized PageRank.

Binary Image Classification and clustering using MRI scans (Python, Machine Learning)

- Developed image-slicing techniques utilizing contours to extract brain boundaries from rs-fMRI scans dataset.
- Applied KNN clustering techniques to classify extracted brain slices from rs-fMRI scans, implementing transfer learning on the Exception model for binary classification of brain images as Resting State Network or noise. Achieved 99.12% training accuracy by leveraging image augmentation to mitigate overfitting.