DEEPIKA KUMAR

OBJECTIVE

Aspiring Neuro Technician with a background in electronics and communication engineering and a foundation in EEG signal processing and machine learning. Passionate about applying Python, statistical analysis, and AI techniques to improve neurophysiological data interpretation. Seeking an opportunity to contribute to clinical EEG analysis and neurodiagnostics while gaining hands-on experience in a healthcare setting.

PROJECTS

SCHIZOPHRENIA CLASSIFICATION USING MACHINE LEARNING ON EEG DATA

- Developed an EEG-based classification model to distinguish between schizophrenia patients and healthy controls.
- Extracted neurophysiological biomarkers (coherence, phase-locking value, connectivity, gamma power, relative gamma power) from EEG signals.
- Applied machine learning models (SVM, Random Forest, Logistic Regression, Decision Tree, k-Nearest Neighbors) for diagnosis support.

BRAIN TUMOR DETECTION USING CONVOLUTIONAL NEURAL NETWORK ON MRI DATA

- Designed and trained a CNN model to classify brain tumors from MRI scans.
- Preprocessed images for segmentation, augmentation, and feature extraction.
- Improved classification performance through hyperparameter tuning.

CONTACT

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Website:
https://deepika-kumar-chd.github.io/Deepika-kumar-chd/

Github:
https://github.com/Deepika-kumar-chd

SKILLS

Machine Learning
Deep Learning
EEG Preprocessing

PROGARMMING & TOOLS

Python
SQL
MNE-Python
TensorFlow
SciPy
Scikit-Learn
NumPy
Pandas
Matplotlib
Seaborn
Git
JavaScript
HTML
CSS

EXPERIENCE

SYSTEM ENGINEER – ACCESS MANAGEMENT

May 2021 - May 2023 (TietoEvry - CBRE)

Competence Field: SQL, Active Directory, Azure DevOps

- Enhanced operational efficiency by optimizing the access termination process, significantly reducing processing time.
- Increased security compliance by implementing Access & Identity Management (AIM) solutions aligned with SOX regulations in the U.S.
- Improved troubleshooting speed by proactively resolving user login/access issues and escalating complex cases to Level 3.
- Strengthened data security by maintaining domain user accounts and group memberships using Active Directory.
- Optimized team collaboration by documenting all access management processes and policies in Confluence, increasing knowledge retention and reducing onboarding time for new team members.

SYSTEM ENGINEER – WEB APPLICATIONS & TESTING

Sep 2020 – Apr 2021 (TietoEvry - Lexin)

Competence Field: Vue.js, JavaScript, HTML, CSS, Cypress

- Improved debugging efficiency by designing and developing a log viewer for the Editor Portal, streamlining issue resolution.
- Increased software reliability by creating and executing comprehensive test cases (both positive and negative) to validate system behaviour.
- Reduced testing time by automating frontend UI testing using Cypress, enhancing test coverage and accuracy.
- Ensured seamless user experience by conducting manual testing and API testing for new features and deployments.
- Maintained application stability through extensive regression testing, preventing defects from reoccurring in production.

ASSOCIATE SOFTWARE ENGINEER

Jan 2020 - Aug 2020 (TietoEvry - Bildetema)

Competence Field: React.js, JavaScript, HTML, CSS

- Boosted frontend performance by implementing Lazy Loading, reducing initial page load times.
- Enhanced development efficiency by designing and maintaining reusable React.js components, cutting redundant work.
- Improved UI/UX consistency by building responsive frontend designs using Bootstrap, ensuring cross-device compatibility.

EDUCATION

PANJAB UNIVERSITY 2018

Bachelor of Engineering in Electronics and Communication

THE PUNJAB STATE BOARD OF TECHNICAL EDUCTION & INDUSTRIAL TRAINING 2015

Diploma in Electronics and Communication

ADDITIONAL LEARNING

NEUROMATCH ACADEMY – COMPUTATIONAL NEUROSCIENCE (ONLINE COURSE)

MACHINE LEARNING & DEEP LEARNING (SELF-TAUGHT VIA ONLINE COURSES & PROJECTS)

NEURAL DATA SCIENCE IN PYTHON (ONLINE COURSE)