Monish Kanna Suresh

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Project Management | Data Analysis | Data Collection | Salesforce | Regression Analysis | Big Data Analysis | Map Reduce Bash Scripting | SQL | Predictive Modeling | Keras | SK-Learn | Power BI | Tableau | AWS | Azure | Google Cloud

Data Scientist / Data Engineer / Machine Learning Engineer

Education:

- **Stevens Institute of Technology, Hoboken, NJ:** Master of Science in Applied Artificial Intelligence **| GPA: 3.93/4.00** **May 2024**
- **Anna University, India:** Bachelor of Technology in Information Technology **| GPA: 3.30/4.00** **May 2021**

Technical Skills:

- **Programming Languages:** Python, Java, C, C#, HTML, CSS, Node.js, React.js, SQL **| Databases:** MySQL, MongoDB, AWS RDS, Oracle
- **Data Visualization Tools:** Tableau, Power BI, Seaborn, Matplotlib **| Cloud Services:** Amazon Web Services (AWS)
- **Deep Learning Frameworks and Libraries:** TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, Pandas, NumPy
- **Software and Tools:** Android Studio, Microsoft Suite (Word, Excel, PowerPoint), Visual Studio, Jupyter Notebook
- **Soft Skills:** Time Management, Leadership, Problem-solving, Decision-Making, Team Collaboration, Adaptability, Critical Thinking

Work Experience

Software Engineer | Magzter Digital Private Limited, India **Dec 2021 - April 2022**

- Implemented AWS WAFV2 for HTTP APIs, achieving a 60% reduction in hacker injections compared to the previous setup, and collaborated with the team in daily scrums to address issues and escalate product security.
- Developed a Node.js algorithm to track and block malicious IP addresses, effectively isolating hackers and enhancing system security for both IPv4 and IPv6 addresses.
- Created an AWS CloudFront Distribution (CDN) solution, reducing direct endpoint usage by 80% and protecting serverless Lambda functions from frequent hits.
- Enhanced API security by enforcing mandatory headers, utilizing AWS Key Management Service (KMS) for secure code management, and optimizing code efficiency with AWS Lambda Layers.

Software Engineer Intern | Genome International Private Limited, India **February 2021 - May 2021**

- Developed a web scraping program to download genomic data, parsing over 2,700,000 genes and their locations.
- Extracted details of 23 chromosomes from genomic databases using web scraping and published the data on AWS EC2.
- Deployed a program to create data records using metadata from over 500 patients, collected information on 1,000+ genes using APIs and SQL, and visualized and stored the data in nested structures.

Project Experience

STEVENS INSTITUTE OF TECHNOLOGY | Hoboken, New Jersey

Facial Key points Detection: GitHub **Jan 2023 - May 2023**

- Developed a high-accuracy deep learning model for facial key points detection, enhancing facial recognition and augmented reality applications by precisely locating facial landmarks and providing valuable data for analytics.
- Implemented a CNN using Python, PyTorch, and OpenCV to accurately detect facial key points in a 96×96-pixel 8-bit grayscale portrait dataset, enabling the identification of 15 facial key points and offering insightful data for further analysis.

Android Health Check: GitHub **Sept 2023 - Dec 2023**

- Led a 3-member team in investigating malware presence in the Android operating system using a comprehensive dataset, providing crucial insights for data analytics.
- Cleaned and reduced the dimensionality of the data, employing various modern data science classification algorithms to build predictive models and evaluate their performance, achieving precise malware detection results for enhanced data analytics.

Drowsiness Detection: GitHub **Sept 2022 - Dec 2022**

- Led a team of three individuals in the development of a real-time system designed to reduce car accidents by monitoring driver's eye movements and issuing alerts for drowsiness detection.
- Processed images and conducted a detailed evaluation of machine learning algorithms, including KNN, CNN, SVM, Random Forest, and Decision Trees, using scikit-learn to identify the most accurate model for detecting driver drowsiness.

Emotion Based Music Recommender: GitHub **Sept 2022 - Dec 2022**

- Designed a deep learning model to deliver personalized music recommendations through real-time emotion analysis.
- Analyzed images and developed 3-layer neural networks that accurately classify human facial expressions into seven distinct emotion categories, enabling a robust emotion-based music recommendation system.

Leadership Experience

ANNA UNIVERSITY | Chennai, India **Jan 2021**

- Organized "Empowering Minds: Machine Learning Workshop" for 75 students, interacted with them focusing on Machine Learning algorithms and their applications, in collaboration with the Information Technology department