ALEKHYA VACHAKARLA

Full Stack Developer

email:alekhyavachakarla12@gmail.com
phone #: +469-910-4128
address: Plano, Texas

CAREER OBJECTIVE

Full stack developer with 4+ years of involved insight in designing, developing and implementing applications and solutions utilizing a scope of cutting edge technologies and programming languages. Trying to use wide development experience and technical expertise in a challenging role.

WORK EXPERIENCES

SOFTWARE ENGINEER

October 2018 - 2022 | Nat IT Services

- Knowledge and hands on experience on **Java**, **Javascript**, **Angular**, **HTML**,**CSS**.
- Having experience in **Blockchain frameworks** and languages such as **Golanguage, Ethereum, JavaSDK, REST API'S.**
- Developed POC'S and applications for the **Industries Insurance**, **Food**, **Pharma**, **Supply Chain**.
- Developed applications in **Salesforce.**Easy learning and flexible to work on different kinds of Technologies

EDUCATION

2022 - 2024 | UNIVERSITY OF NORTH TEXAS

Master of Science in Computer Science

- Member of The Artificial intelligence Research lab under the professor Dr.Xiao Ting

2014 - 2018 | BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

Bachelor of Technology in Computer Science

PROJECTS

Project #1

Title : Curtin Coin.

Position : Software Engineer

Environment**:** Ethereum, Java, Angular 10, web3 js

Project Description:

Curtin Coin is an application where students get rewards from faculty in the form of redeemable, virtual currency for engaging in various learning activities.

Responsibilities:

- Built using Ethereum.
- Used Java SDK for Middle layer to communicate with the solidity contracts.
- I worked with Angular.
- Worked with Ethereum smart contracts (Solidity).
- Build single page angular applications which could scale with both increase in interaction complexity and volume.
- Involved in overcoming any issues among graphic and technical implementation by working the two sides and helping characterizing the applications look and feel
- Translation of UI/UX plans to code bringing about visual components of the application.

Project #2

Title : Hitrack.

Position : Software Engineer

Environment**:** Hyperledger Fabric, Java, Angular 10, web3 js

Project Description:

HI-TRACK is an integrated Agri-Food traceability platform, following are the salient features:

- Complete seed to sale traceability recorded on Blockchain system.
- Integration with BOM (Bureau of Meteorology) data for location-based weather inputs. IoT sensors to capture vital parameters such as soil moisture, humidity and temperature. IoT dashboard with real time alerts for superior growth environment control.
- Role based modules for regulatory authority and testing agency.
- Custom reports & possibility of integration with other allied systems.
- Geo-tagged photos, automated notifications and birds eye view of all the farms provides regulators greater control over cultivation in their region.
- Unique Identifier for incoming seeds and outgoing stocks and samples.
- QR codes for harvested stock which provides every detail from source, sowing, flowering to harvesting, pesticide or fertilizer usage etc.
- Powerful analytics to provide insights to farmers to repeat good crop performance. Convenient Web based, Android & Apple iOS mobile apps for accessing applications from the field.

Responsibilities:

- Built using Hyperledger Fabric.
- Used Java SDK for Middle Layer.
- Worked with Angular to design and handle Rest API calls
- Implemented web performance optimizations and ensured web pages confined to accessibility standards.
- Implemented Auth guards to ensure access only to authenticated users.
- Improved the speed of application loading time by implementing lazy loading.

Project #3

Title : Drug Supply Chain.

Position : Software Engineer

Environment**: Hyperledger Fabric, Go Chain codes, Java SDK, REST API.**

Project Description:

Drug supply Chain solution in Blockchain drives substantive improvements to the

pharmaceutical supply chain. Using blockchain technology to track a drug through its entire lifecycle provides all parties assurances of its safety and authenticity.

Responsibilities:

- Built using Hyperledger Fabric.
- Written chain codes in Go language.
- Used Java SDK for Middle Layer.
- Used Ionic to allow the users in the application to instantly update the information of the drug without reloading.

Project #4

Title : Fangame.

Position : Software Engineer

Environment**:** Salesforce

Project Description:

Fangame Application is a self-learning application which is used in training the employees/students on any technology in an organization/Institution.

- It will allow admin to create some contests with any number of points.
- The application will be able to keep track of employee/student performance based on their participation and completion of the contest successfully.
- Dashboards which show the performance of employees in the application.
- Email alerts about the performance will be sent to the leaders in the system.
- Role based modules for Employees and Leaders
- Convenient Web based, Android & Apple iOS mobile apps for accessing application

Responsibilities:

- Analyze the business requirements.
- Implement solutions and develop applications on the Force.com platform using salesforce out of the box features and apex.
- Develop, document and enforce application standards and procedures.

Project #5

Title : Product Warranty.

Position : Software Engineer

Environment**: Hyperledger Composer, Javascript, Angular Js.**

Project Description:

Product servicing in Blockchain is an important aspect of customer care and impacts satisfaction. Product companies incur their own costs for product repairs while under warranty while servicing beyond warranty period is covered through maintenance or general service agreements. The solution involves different entities such as Customers, Service technicians, product manufacturers, Service Agents in a decentralized Blockchain ecosystem to provide transparency in warranty service of a product.

Responsibilities:

- Involved in designing and process flow of the application.
- Built using Hyperledger Composer Tool to generate BNA.
- Utilized HTML, CSS, Angular JS to create responsive design for the end users.
- Worked with Angular Js to Handle Rest API calls.

Project #6

Title : Vehicle Insurance.

Position : Software Engineer

Environment**: Hyperledger Fabric, Go Chaincodes, Java SDK, REST API.**

Project Description:

Vehicle Insurance in Blockchain enables more efficient claim processing. The solution offers a transparent claim process through the different stakeholders such as Customer, Insurer, service center, surveyor.

Responsibilities:

- Built using Hyperledger Composer Tool to generate BNA.
- Designed, implemented web application and handled Rest API calls using AngularJs.

Project #7

Title : Autonomous Tagging of Stack overflow questions.

Environment**:** Python, NLTK, Tensor flow

Project Description:

The objective of this project is to build different models which classify the category of the question posted or inputted. With the help of deep learning models and bert models, I have implemented this mechanism with more precision and accuracy

- Using different NLP techniques to prepare and process the data.
- Creating a Fully trained model and training the model with the dataset
- Evaluate the performance of the model and check whether the model is able to determine the category of the given input text correctly or not.

Responsibilities:

- Added different visualizations of data.
- Data preparation/ cleaning.
- Implemented a basic sequential model with deep learning layers.
- Implemented Random Forest Classifier
- Implemented best multi label classification models like oneVsRest classifier
- Implemented GRU model
- Added Evaluation metrics to the models implemented

Project #8

Title : Temporal Topic modeling to determine trends in field of Artificial Intelligence

Environment**:** Python, NLTK, Tensor flow

Project Description:

In many ways, staying connected to the patterns in a particular space is a difficult task. A fundamental concern for researchers is how to distinguish emerging research patterns. We propose using weighted temporal variables to bias topic clustering towards articles published in the same time period. In any case, many available clustering approaches don't compel a desire for time related clustered findings, because the season of distribution is mostly ignored as a factor, as is the time of publication. We recognize trending AI subjects that are not recognizable when we utilize a standard clustering approach with no inclination towards time. The Bert Model is used to find the most

essential words across a series of AI journal abstracts as part of this suggested approach. For classification, feature vectors or word embeddings are analyzed in detail. The bert model can be used to determine the contextual relevance of a word. We use an evaluation of the silhouette score divided by the standard deviation of clusters to identify trending topics.

Responsibilities:

- Scraped Data to collect Artificial Intelligence Journals
- Different Natural Language Processing techniques are applied to pre-process the data.
- Data gathered from two sources
  - IEEExplore - publication
  - JMLR- Database
- Applying BERT model to the data and generated vectors
- Applied different Clustering techniques to identify which works better on the data

SKILLS

Programming languages: Java, Python

Frameworks and Technologies : Angular, HTML, CSS, Bootstrap, NodeJS, React, Ethereum, Hyperledger Fabric, Web3js, Solidity