Rakshith Churchagundi Amarnath

Chicago, IL   +1 (312) 273-8194   rchurchagundiamarnat@hawk.iit.edu   LinkedIn   Portfolio   GitHub

SKILLS

Programming Languages: Java, Python, JavaScript, R, C/C++, C#, VB.NET, SQL, Assembly Level, HTML5, CSS3, XML, PHP
Tools: AWS, Microsoft Azure, R-studio, Tableau, Visual Studio, MATLAB, Android Studio, Anaconda Python, JIRA, Git
Database: MySQL, MongoDB, PostgreSQL
Methodologies: Agile, Scrum, Waterfall
Automation Tools: Jenkins, Docker, Kubernetes, Gradle
Big Data Technologies: HDFS, Pig, Hive, Spark, Hadoop, MapReduce, Yarn, Apache Kafka, Cassandra
Machine Learning/Statistics: Statistical Analysis, Linear/Logistic Regression, Clustering, Graph Theory, Regularizations, TensorFlow

EDUCATION

ILLINOIS INSTITUTE OF TECHNOLOGY   *Master's in Computer Science (GPA – 3.4)*   *Chicago, IL (Aug 2018 -May 2020)*
    Courses: Computer Vision, Design and Analysis of Algorithms, Artificial Intelligence, Data Mining, Big Data Technologies, Biometrics, Computer Networks, Mobile App Development, Enterprise Web Applications

RAJEEV INSTITUTE OF TECHNOLOGY   *B.S in Computer science (GPA-3.6)*   *Hassan, IN (Aug 2012- May 2016)*

EXPERIENCE

COLONY DISPLAY INC. – *Solutions Architect/Analyst*   *Greater Chicago, IL (Jul 2020 – Present)*
- Analyzed the company's Business Strategy and defined System Architecture to achieve Business goals
- Designing, Developing Internal web-based applications and databases
- Deploying cloud services to solve product inventory issues
- Data analysis/visualization for QBR, and resolved performance issues
- Translated technical specifications into product requirements
- Implementing cloud services for Project Management team

BMW TECHNOLOGY CORPORATION - *Software Engineer Intern*   *Chicago, IL (Jun 2019 -Aug 2019)*
- Worked on Azure ML for location service recommender for the vehicle
- Backend service development, data analytics ML integration
- Analysis of BMW user location data in the EU, US, and ROW Environments
- Worked on Microsoft Service Fabric, Microservices, and GDPR Module
- Wrote Single Page Applications using RESTFUL Web Services plus Angular JS
- Implemented the client-side validations using jQuery and JavaScript
- Used JIRA for task distribution and productivity

ILLINOIS INSTITUTE OF TECHNOLOGY – *Student Assistant, On-Campus Photographer*   *Chicago, IL (Jan 2019 - May 2019)*
- Assisted in performance evaluation of high-performance computing systems and Network Analysis
- Developed, Deployed, and maintained webpages for registration for new students
- Was recruited as an official on-campus photographer and managed college's social media account

CAMPUS CONNECT TECHNOLOGIES – *Data Scientist/Engineer*   *Bangalore, IN (Mar 2016 – Apr 2017)*
- Analyzed and Identified big data Problems, implemented predictive analysis trends using Python.
- Used Python Django for analytics and building strategies for further enhancing the Application
- Handled data modeling, analytics, and visualization to draw a strategic business plan
- Used JavaScript to develop an interactive user interface that exceeded client expectations and met KPIs

PROJECTS

Implementation of Kernel Function Based on Ramanujan Sums for Computer Vision to Pulmonary Disease   *[Aug 2018]*
- Developed an image kernel using OpenCV, CNN, and Python
- Introduced a third-order Kernel for edge detection as an image processor that recognizes whether the images input have pulmonary diseases
- Trained the model using Keras Sequential API and with High Dimensional Data
- Achieved an accuracy of 98.8% with CNN

Artificial Intelligence - Connect Five Game Playing Engine   *[Dec 2018]*
- Developed an AI Player using the Minimax algorithm with an evaluation function played on an 8x9 grid
- Implemented Alpha Beta pruning by modifying the Minimax algorithm which yielded 30% more efficiency
- Developed a dynamic search depth, searching deeper under some positions than the opponent
- Finally ran tests by playing it interactively with different depths

Keystroke Dynamics – ML -Biometrics   *[Jan 2020]*
- A project to collect Key Stroke Data, refactor it and analyze it by applying different algorithms models
- Built a Behavioral Typing Recognition model and trained it by providing it with typing patterns of the users to be enrolled
- Developed and verified the identity of a user's unique characteristics for establishing the identity
- This model rejects the imposters while accepting the genuine users based on the test pattern similarity to the trained model for the user
- Tested various detectors which provide different ways of measuring this similarity
- Accuracy of 98% with Manhattan distance, 97% with Euclidean distance, and 99% with K-Means

PUBLISHED RESEARCH PAPERS

i.   A machine learning application for diagnosis for the respiratory disease through pulmonary function test data.   - IJIR, Vol.3, 2017 [LINK]
ii.   Strategy for Testing Healthcare Applications on Blockchain Technologies.   - IJAREEIE, Vol. 8, July 2019 [LINK]
iii. Evaluation of Machine Learning Tool-Kits for Big Data: MLlib, Mahout, SAMOA & H20   - IIT, Spring, 2020 [LINK]
iv.   An Optimal Machine Learning approach for Fault Coverage Improvement on Silicon Through Functional cases.   - IJAREEIE, Nov. 2017 [LINK]