Vaijyant Tomar
(980) 938-9851 ● vaijyant.tomar@gmail.com ● 11018 Graduate Ln, APT L, Charlotte NC 28262
www.LinkedIn.com/in/Vaijyant ● www.GitHub.com/Vaijyant ● vaijyant.github.io

EDUCATION

Master of Science in Computer Science May 2018
University of North Carolina Charlotte, Charlotte, North Carolina 3.9/4.0
Coursework: Software System Design and Specification, Data Structures and Algorithm Design, Machine Learning, Computational Human Behavioral Model, Intelligent Systems, Knowledge Discovery in Databases

Bachelor of Technology in Computer Science & Engineering with Honors June 2015
Dehradun Institute of Technology, Dehradun, Uttarakhand, India 80.36/100

TECHNICAL SKILLS

Development: Java, Python, C, J2EE, Django, HTML, REST, XML, CSS, JavaScript, jQuery, Node.js, Tomcat
Database: SQL, MySQL, SQL Server, Oracle, Firebase (NoSQL).
Machine Learning: Pandas, Scikit-learn, NumPy, Matplotlib, TensorFlow.
IDE and Project Management: IntelliJ IDEA, Eclipse, Spyder, PyCharm, Jupyter, JIRA, Agile, Perforce P4V, Git, GitHub.

WORK EXPERIENCE

Infosys Ltd. *(Pune, India)*
Systems Engineer July 2015 – December 2016

- Analyzed requirements, collaborated with business users to resolve issues in project implementation.
- Developed various Informatica Workflows to load the data from upstream systems and Sybase datastores.
- Engaged in every phase of Software Development Life Cycle and employed agile method of software development.
- Tracked and managed agile development of the project using JIRA.

Infosys Ltd. *(Mysore, India)*
Intern February 2015 – June 2015

- Developed a web application titled Integrated Medical Treatment using Open Source technologies (HTML, CSS, JavaScript) and LAMP stack (Linux, Apache, MySQL, PHP)
- Performed Integration testing and unit testing to comply with the design specification.

PROJECTS

Java Web App**:** *Bookstore, Notes:*
Link: https://github.com/Vaijyant/Notes, https://github.com/Vaijyant/ITCS-6160-DatabaseSystems

- Developed J2EE Web App using MVC architecture and implementing JDBC-ODBC bridge to access MySQL database.
- Developed GUI using HTML, CSS, and JavaScript.
- Used Apache Maven to keep track of project dependencies by implementing pom.xml.

Robot Motion Planning
Link: https://github.com/Vaijyant/ITCS-6150-IntelligentSystems/tree/master/ISProjectFinal

- Implemented LRTA* Algorithm for robot motion planning. To simulate robot motion, the algorithm was implemented in a Java Swing application.

CopyToFlash
Link: https://github.com/Vaijyant/CopyToFlash

- Developed Java GUI application title *CopyToFlash* which copies a file to all the connected disk drives on a single click.

Emotion Detection in Speech
Link: https://github.com/Vaijyant/ITCS-6050-ComputationalHumanBehaviourModel

- Detected human emotion from human speech, in the English language, by extracting acoustic features with an AUC of 75.78%.
- Implement classification models such as Random Forest, Support Vector Machine, K-Means clustering, and Neural Network along with tuning the hyperparameters for the algorithms using Python libraries.
- Preprocessed data using Python to remove meta data associated with the audio *.wav files.

Machine Learning Algorithms
Link: https://github.com/Vaijyant/ITCS-6156-MachineLearning

- Implemented Algorithms for Principal Component Analysis, K-Means clustering, Logistic regression, Linear discriminant analysis and Neural network from scratch in Python.

Loan Dataset Analysis
Link: https://github.com/Vaijyant/ITCS-6162-KnowledgeDisvoveryInDatabases

- Achieved AUC of 74.91% on task of predicting if a customer would default a loan using Loan Dataset from Kaggle.
- Implemented CRISPDM and developed Logistic Regression, Random Forest, and Decision Tree models.
- Prepared data by using techniques like – data cleaning, variable transformation and feature engineering.

Wordament
Link: https://github.com/dharak029/wordament

- Developed a python GUI application using pyGame python library to provide GUI and interactive capabilities for the application.
- Also took advantage of object-oriented nature of Python language by creating class for the GUI interface of the application.

University portal
*Link***:** https://github.com/Vaijyant/ITCS-6112-SoftwareSystemDesignAndImplementation

- Python Django framework and MySQL database were used for the application development.
- Used software modelling techniques such as UML Diagram, Use Case diagram, ER Model, Sequence diagram.