CHAITANYA BOGGAVARAPU

GitHub || LinkedIn ||Stack overflow || Portfolio

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EXPERIENCE SUMMARY:

4+ years of professional experience in software development with expertise in Analysis, Design, Development, Implementation and testing. Have an Ability to develop and implement within feasible timelines and budgets along with an ability to effectively lead cross-functional teams towards goals and passionate in learning the evolving coding techniques.

- Designed and developed various machine learning models such as Supervised Algorithms (Logistic Regression, Linear Regression, Decision Trees, Support Vector Machines, Neural Networks), Unsupervised Algorithms (K-Means, Mixture Models) and Dimensionality Reduction Techniques (ICA, PCA).
- Experience in analyzing data using Python-Pandas, NumPy, R, SQL, Microsoft Excel, Hive, PySpark for Data Mining, Data Cleansing, and Machine Learning.
- Developed an Inventory System full stack application using Python-Flask framework, ReactJS, HTML5, JSON, CSS3, Bootstrap, SQLite.
- Experience on creating models for Facial Recognition and Sound Separation using Keras, TensorFlow, Python and Deep Learning Techniques.
- Worked with Image Processing techniques like Geometric Transformations, Thresholding, Smoothing, Morphing, Histograms using OpenCV and PIL.
- Experience in using Matplotlib to generate Scatter, Bar, Pie Chart, Series and Contour plots.
- Implemented a project to connect AWS-S3 storage and Postgres SQL using Python-Boto3.
- Worked with MoviePy, SciPy packages for analyzing interviewed audio and video data.
- Developed Desktop applications for a business client using PyQt5 and PyInstaller.
- Hands on experience in developing shipment industry web application using C#.NET, ASP.NET, ADO.NET, LINQ, SQL Server 2016/12, Entity Framework, JavaScript, HTML5, CSS3, jQuery, AJAX, Bootstrap.
- Developed IoT thermostat using AWS Ec2,S3,Boto3 with Python as programming and MySQl as Database.
- Created multiple Virtual environment with different python versions using Conda, Virtualenv.
- Hands on experience in writing stored procedures, views, complex statements and triggers using SQL Server 2016/2012.
- Good Knowledge on Objected Oriented Concepts, Data Structures and Design patterns.
- Proficient in using version controlling tools GIT and TFS, debugging, problem solving, optimization and testing skills.
- Excellent analytical and problem-solving skills and ability to work on own besides being a valuable and contributing team player.

TECHNICAL SKILLS:

Programming Languages	Python, MATLAB, C#.NET, ASP.NET.
Web Technologies	HTML5, CSS3, ReactJS, JavaScript, jQuery, JSON and XML.
Databases	SQL Server 2016/2012, SQLite and Postgres,MongoDB(NoSQL)
Operating Systems	Windows XP/ 7/8.1/10, Windows Server 2008/12/16 and Linux.
Web Server	Heroku, Docker, GitHub and Internet Information Server (IIS).
IDE	Spyder, PyCharm, Visual Studio.NET 2019/2017/2012.
Framework	Flask, Django, Microsoft .Net Framework 6.0/5.0/4.5/4.0.

Versioning Tools	GIT, TFS and SVN.
Methodology	Agile Methodology, Scrum Model, Waterfall method.

EMPLOYMENT DETAILS:

- Worked as a Research Assistant- Software Engineer as Mind Research Network.
- Worked as a Teaching Assistant/ facilitator at University of New Mexico.
- Worked as a Project engineer at Wipro Technologies.

EDUCATION DETAILS:

- Completed master's in computer engineering at University of New Mexico with an aggregate GPA 3.78 of 4.
- Completed Bachelor of Technology in Electronics and Communication Engineering from SRM Institute of Technology and Science, Chennai with an aggregate of 76%.

EXPERIENCE DETAILS:

1. Client: **Mind Research Network.**   **(Dec 2018 – July 2020)**

 Position: Software Engineer
 Technologies: Python, R, MATLAB, HTML5, CSS3, XML, SQL Server, Linux and GIT.
 IDE and Servers: Spyder, Jupyter Notebook and Linux Server.

 Description: Mind Research Network is a Research Center which is dedicated to the discovery and advancement of clinical solutions for the prevention, diagnosis, and treatment of mental illness and other brain disorders.

 Responsibilities:
- Designed and built machine learning classification algorithms for classifying controls to Schizophrenia patients.
- Importing and exporting data jobs to perform operations like copying data from HDFS, copy to HDFS.
- Developed Spark code and Spark-SQL/Streaming for faster testing and processing of data.
- Analyzed SQL scripts and designed the solutions to implement using PySpark.
- Developing Convolution Neural Network Model (u-net and PIT) using transfer learning for source separation in sound.
- Performed preprocessing techniques in converting video to desired formats and changing the audio sampling rates using MoviePy and SciPy packages.
- Developed data analysis model(frequentist) using SPSS for calculating correlation between Facet score and time.
- Developed Desktop application using PyQt5 for comparing Multi-fusion Model.
- Maintaining source code of application using GIT to maintain the application versions as well as team collaboration.

2. Client: **Wipro Technologies**   **(Dec 2014 – Dec 2017)**

 Position: Project Engineer
 Technologies: C#.NET, ASP.NET, ADO.NET, RESTful Services, JSON, HTML, JavaScript, AJAX, Bootstrap, Salt Encryption, Entity Framework.
 IDE & Servers: Visual Studio 2012, SQL Server 2012/2008 R2, Windows Server 2008, TFS.

Description: Wipro is a global information technology, consulting and outsourcing company with 170,000+ workforce serving clients in 175+ cities across 6 continents. The company posted revenues of $7.7 Billion for the financial year ended Mar 31, 2016. Wipro helps customers do business better by leveraging our industry-wide experience, deep technology expertise, comprehensive portfolio of services and vertically aligned business model. Our 55+ dedicated emerging technologies 'Centers of Excellence' enable us to harness the latest technology for delivering business capability to our clients.

Responsibilities:
- Working on multiple projects in procurement and sourcing domain implementing the config and code changes.
- Designed and implemented the Core components for the application, which included a Data Access Layer (DAL) and an error logging component using C# and SQL languages.
- Layout design and web pages programming using ASP.NET, C#.NET, HTML5, CSS3 and JavaScript.
- Applying configuration changes between the environments through XML Document/Read/Write operations.
- Writing complex queries, stored procedures, materialized views, analyzing database objects, creating indexes for optimizing database performance.
- Enhancing the existing application features using RESTful services, JavaScript, LINQ and AJAX,
- Developed data integration packages using SSIS and data reports using SQL Server Reporting Services (SSRS) for reporting data.
- Using Exception Handling to handle runtime & user defined exceptions.
- Maintaining source code and version of application using TFS and performing unit testing and application deployment.

ACADEMIC PROJECTS:

1. Project: **AOLME**   **(Feb 2018 - July 2018)**
  Technologies: Python.
  Server version: Raspberry Pi.

  Responsibilities:
- AOLME is a project for underrepresented middle school students to teach them how to code
- Taught Image processing techniques to middle school students which include calculating histograms, morphing images, selecting the region of interest on image using open cv.

2. Other Projects:
- Created a small application using Flask, SQLite and hosted on Heroku:
  https://trackarrival.herokuapp.com/

- **Full Stack –** Developed a full stack project using **React Js**, **Python Flask :**
  https://github.com/ChaitanyaBoggavarapu/Full_Stack_proj