**RESHMA SRI CHALLA Software Developer**

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# PROFILE

* Masters graduate actively searching for full-time job opportunities
* 3+ years’ experience as a software developer
* Worked in a collaborative agile environment with technical and non-technical stakeholders
* Efficiently translating business requirements to a web-based solution
* Always curious to learn new things with adaptability to challenging situations

# SKILLS

* **Programming Languages:** Python, R, C#, Java
* **Web Technologies**: .NET frameworks, MVC, HTML 5, CSS, TypeScript, JavaScript, jQuery, Bootstrap
* **Database Systems and Languages:** SQL, Oracle
* **Cloud Technologies:** Azure
* **Development Tools/ Servers**: Eclipse, Visual Studio, Visual Code, Microsoft SQL Server Management Studio, Microsoft Machine Learning Service, SSIS, SSRS, JIRA
* **Version Control**: Git/GitHub, SVN
* **SDLC Methodologies**: Agile, Scrum, TDD, CI/CD
* **Testing**: Manual and cross browser testing
* **Code Analyzer Tools**: SonarQube, PMD andTeam Scale

# WORK EXPERIENCE

1. **SOFTWARE DEVELOPER,** StoreForce, Toronto May 19 - Apr 20
	* + Designed a web-based business requirement document for main StoreForce application (an application for retailers).
		+ Technologies used: Visual Studio, Typescript, C#, CSS, HTML, jQuery, SQL Server.
		+ Communicated with technical and non-technical stakeholders to understand and define business requirements and provide a web-based solution.
		+ Worked in an agile, collaborative environment, associating with other developers, testers, client engagement managers, and database administrators through daily and weekly scrum meetings.
		+ Continuous delivery through quick feedback loops and developed the right product with supported peer walkthrough of source code and the creation of formal documentation.
		+ Participated in weekly Scrum meetings with teams to discuss and overcome the issues faced.
		+ Used primarily Microsoft .Net related programming languages and technologies, wrote code and performed testing and debugging of applications.
		+ Developed product is used to gather business requirements from each client and automated data collection for development of other components of the main StoreForce application.
		+ Optimized business requirement gathering stage by saving 80% time.
	* Identified the components on the company’s application which can be improved by leveraging machine learning. Presented actionable insights in detail.
	* In-depth study on how to implement machine learning algorithms in visual Studio and in SQL Server using stored procedures.
	* Organized and gathered the data using SQL procedures and queries. Performing visualizations on this to identify patterns.
	* Implemented various statistical and machine learning techniques like deep learning models, regression models with regularization. Predicting traffic in retail stores both as times series analysis and regression tasks.
	* Evaluated modeling results and constantly communicated the results at every stage thorough weekly meetings.
	* Predicted traffic represented 20% improvement than existing methods.
2. **SOFTWARE DEVELOPER,** Franklin Templeton Investments, India Jan 16 - May 18

* Produced results that helped the company understand the revenue potential of different airports for investment.
* Translated the objective “to understand the revenue trends of the International Airports through the number of passengers” into a data science problem-Airport Passenger Traffic Project.
* Extracted the flight and passenger information from various websites using web scrapping as airport revenue is correlated with traffic.
* Established time series analysis of passengers in various international airports using models like ARIMA and LSTM in R and Python.
* Implemented and validated predictive models, using quick feedback loops to iterate and develop the most usable models for the specific use case.
* Produced results that helped the company understand the revenue potential of different airports for investment.

# ACADEMIC CREDENTIALS

**Master of Computer Science**  Sep 18 - May 20 University of Ottawa, Canada 3.5/4 CGPA

**Bachelor of Technology in Software Engineering** Jun 14 - May 18

SRM University, India 3.8/4 CGPA

# PROJECTS

1. **Online Service Provider 2017**

Developed a website that bridges the gap between the NGOs and the public using web technologies.

1. **Study of Technical Debt in Open-Source Projects 2018**

Studying the Quality assessment, identification, representation, estimation, monitoring, repayment, prevention of technical debt in a few open-source projects using tools like SonarQube, Teamscale, checkstyle. Defining a cost model to estimate the technical debt principal using SonarQube.

1. **Study of Word Embedding in Supervised and Unsupervised Tasks 2020**

Study of several word embeddings including Word2Vec, FastText, Glove, SBERT, and Doc2Vec is conducted for supervised and unsupervised tasks on the Quora dataset. Supervised task is to identify duplicate questions in the dataset through binary classification, while the unsupervised task is clustering Quora questions.

1. **Ethical AI Design project on Amazon Echo Smart Speaker 2020**

Considered the fact that the Amazon Echo can be placed in any space. Identified and analyzed ethical issues in Amazon Echo smart speaker. Built Value maps with stakeholders, values, and value tensions. Identified the key-value tension and performed ethical analysis. Identified and prototyped a solution for those issues. Designed one or more features into the Echo to make sure it is recording/sharing data appropriately in those different spaces.

1. **Predicting the Critical Temperature of Superconductors 2019**

Depending on superconductor’s critical temperature they are used for various applications. We used different machine learning regression and classification techniques to determine the critical temperature and its level of superconductivity.

1. **Predicting Protein Residue-Residue Contacts 2019**

Comprises of protein contact prediction using machine learning models - random forest and logistic regression classifier. The primary goal of contact prediction here is typically to produce predictions that correctly label a pair of amino acids in a protein as “in contact” or “not in contact”. Protein Data is downloaded from Protein Data Bank as PDB files.

1. **Sentiment Analysis on Drug reviews 2019**

Gathering the data using web scrapping from two pharmaceutical domain websites. Performed sentiment analysis to predict the sentiments regarding side effects, overall satisfaction and effectiveness of user reviews on distinct drugs using the NLP techniques. Examined the transferability of trained classification models among data sources.

1. **Emotion Monitoring System for the elderly 2018**

Patient’s emotion is detected through their ECG signals using Pan Tomkins, Principle Component Analysis (PCA) and Support Vector Machine (SVM) algorithm.