# Nakul Chawla

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#### Skills

## Programming Languages

• C#; Python; C; C++; .Net;.Net core; scala;

#### Frameworks

• node.js; angularJs; angular2; d3.js; JavaScript; jQuery; HTML5; CSS3; hadoop; spark;

#### **Databases**

• PostgreSQL; Microsoft SQL Server; Teradata; firebase;

#### Misc

• Git; JIRA; RESTful API WebServices; Jenkins; IIS;

#### **Employment**

## Software Application Developer

## Arizona State University

March 2017 - Present

- Working on a full stack application for administration of Doctorate students in College of Speech and Hearing..Net core, angularJs
- Designing the application and integrating it with blackboard for a better user experience.
- Providing more administrative features to the department for better understanding the growth and development of the PhD students.

#### Business Intelligence Developer

#### Target Corporation

July 2015-July 2016

- Implemented algorithms to find out the trade area for each store at Target.hadoop, pyspark, python, sql, hive
- Built and deployed scripts to automate the process for analysing the Guest shopping patterns at Target stores in California.
- Built scripts to realise ray casting algorithm in order to find locations of Target guests.python
- Analysed the demographics and merchandise correlation for target stores to optimise the supply chain expense.

#### Full Stack Developer

#### Target Corporation

July 2013-July 2016

- Launched a full stack MVC Single Page application for real estate tax analysis saving about half a million dollars per year. C#,.Net, angularJs,sql server
- Built and had complete ownership of the application to track the real estate tax for each store.
- Built and owned modules to support the court appeals for each store owned by Target.
- Built and owned a full stack application for managing Vendor Income documents and analysing collected income and profits out of the vendor income. HTML5, jQuery, SQL
- Built and deployed application for inventory shortage analysis and supply chain analysis for stores and target.com merchandise.SQL, html5, javaScript
- Implemented complete reporting for Real Estate Tax, Inventory Accounting and Analysis, Vendor Income for further analytics.

# Education

## Tempe, AZ

# Arizona State University

Fall 2016 - Expected Fall 2018

- Masters in Computer Science, GPA:3.33
- Graduate Coursework: Statistical Machine Learning; Principles of Programming Languages; Distributed Database Systems; Knowledge Representation & Reasoning; Advance topics in Databases;

## Bangalore, KA

## M.S.Ramaiah I.T

Fall 2009 – Summer 2013

- B.E. in Information Science, Summer 2013 GPA:3.53
- UG Coursework: Database systems; DBMS; Business Intelligence; Data Structures and Algorithms; Object Oriented Programming;

## Technical Experience

## **Projects**

- KDD 2016 Paper Acceptance Rank Prediction (2016). Predicting the ranking of an institution based on heterogeneous data provided by Microsoft Academic Graph API. Used Brown's Simple Exponential Smoothing, SVM Rank and Gradient Boosting Decision Trees to predict ranks and evaluating them using the Normalized Discounted Cumulative Gain. Python, SQL, Google Big Query
- Custom Compiler for python like language in ANSI C (2016). Developed parser and compiler for a python like language in 5 stages entirely written in C.
- Spatial indexing for an in-memory geospatial database (2017). Implementing spatial indices for a geo-spatial in memory database. Potimising the implementation of PR-Quadtrees and PRM-Quadtrees to make indexes work in a cache conscious way. Critical analysis of research papers in in-memory database systems. C++

## Additional Experience and Awards

- Pyramid Award at Target: for developing and automating Vendor Income Analysis faster than designated time period saving 100 hours of manual effort every month.
- Partner's Award: at Target for Vendor Income Analysis.
- Research/Travel grant reviewer-GPSA: Reviewing and approving grant applications from candidates in research.