NAMRATA SIVAKUMAR

404 Kerby St Arlington Texas 76013 **Email:** namrata.sivakumar1@gmail.com, **Phone:** (682) 375-6117
LinkedIn: https://www.linkedin.com/in/namrata-sivakumar1/ **Personal Website**: https://namrata-siv.netlify.com/

EDUCATION

THE UNIVERSITY OF TEXAS AT ARLINGTON | Master of Science, Computer Science, GPA 3.5/4
Graduated May 2019 | Arlington, Texas
Specialization: *Software Engineering and Databases/Big Data*
Programming Coursework: *Algorithms and Data Structures, Data Analysis and Modelling Techniques, Software Engineering Management, Web Data Management, Networks, Software Testing, Cloud Computing & Big Data, Database Systems, Secure Programming, Python Programming*

ANNA UNIVERSITY | Bachelor of Engineering, Computer Science and Engineering, GPA 7.9/10
Graduated May 2017 | Chennai, India
Major Coursework: *Operating Systems, Theory of Computing, Computer Architecture, Programming Languages, Computer Networks*

WORK EXPERIENCE

Junior Software Engineer (Volunteer) | DataTrine Systems Inc.
September 2019 – present | Remote
- Integrated Google Analytics, HubSpot APIs to the application and implemented web hooks over tokenization.
- Resolved minor bugs and issues in the application involving API integration, redirections and web hooks.

Intern | HCL Technologies
April – June 2015 | Chennai, India
- Developed a "customer retention and feedback" application in Java using Swing classes, Java Database Connectivity API using Oracle 9i for Database Connectivity.
- Assisted in Software Documentation, Object Oriented Design of the project by developing UML diagrams in Rational Rose and StarUML, Project Planning using Work Breakdown Schedule and Microsoft Project Plan.
- Leveraged Knowledge: Object Oriented approach, Unit Testing of Software, Software Documentation, Root Cause Analysis

CERTIFICATION

Developing Applications with Google Cloud Platform(GCP) by Google, a 4-course specialization by Google Cloud on Coursera. Specialization Certificate earned on May 24, 2019 - Click to see Credential

PROJECTS (GitHub: https://github.com/namratasiv/)

- **Instant Money Transfer Web Application**
Spring'19 | Team Project
Developed a full-stack web application using **ReactJS, StripeJS and Relay** for transferring money using a digital wallet. Registered users of the application have the ability to add bank accounts, credit/debit cards to the wallet. **MongoDB and GraphQL** were used for the application's backend. The focus of this project is to find security vulnerabilities of the web application and how it can be remodeled to prevent fraud attacks during the development process.
- **REST API for a local business**
Spring'19| Individual Project
Developed a web app for a local business with **MERN (MongoDB, Express.js, ReactJS, Node.js)** technology stack. Postman was used to test the REST API. The web app enables the user to book appointments, check schedule and manage his account. Creating the web app using the REST architecture helped convert complex functionalities into simple processes.
- **Processing Live Tweets from Twitter4j API**
Fall'18 | Team Project
Developed the project in **Java** using Python's micro server called **Flask** to process tweets using public Twitter4j API stream in **Apache Storm**. This program calculates the top/trending keywords using topologies such as **SPOUT, BOLT** for parsing the tweets and counting the keywords. This is an application which is a close replica to programs which calculate 'trending' in similar platforms.
- **K-Means Clustering in Java**
Fall'18 | Individual Project
Java program for centroid clustering using K-means clustering was implemented on the Comet cluster that is a cluster dedicated to the class by the SDSC (San Diego Supercomputer Center). A set of points are used to find the closest centers by which a centroid is assigned to each cluster using the Lloyd's algorithm. The goal is to partition a set of points into k clusters of neighboring points in a distributed computing environment (HDFS).
- **Graph Partitioning using Apache Spark and MapReduce**
Fall'18| Individual Project
Built a program in Java and Scala that partitions a graph into K clusters using multi-source breadth-first search. It selects K random graph vertices, called centroids, and then, assigns the centroid to its unassigned neighbors. These programs reinforce the fact that Spark with Scala runs programs **100x faster** than MapReduce (Java) since it does the processing in the main memory of the worker nodes and prevents the unnecessary I/O operations with the disks.

TECHNICAL SKILLS

- **Languages:** C++, Java, Python, HTML5, CSS3 (Sass, Less), JavaScript, ES6, PHP
- **Back-End and Technologies:** SQL, Oracle, MongoDB (NoSQL)
- **Big Data Frameworks**: Hadoop, Spark, Pig, Hive, Storm, HDFS
- **Applications**: Eclipse, Atom, Visual Studio Code, Sublime, Brackets, Spyder, Jupyter Notebook
- **Frameworks/ Libraries**: Node.js, Express, ReactJS, Bootstrap 4, CodeIgniter, Flask, Jinja2
- **Virtualization Tools**: Vagrant, VirtualBox, RedHat
- **Software Testing Tools**: JUnit (ParamsRunner and Parameterized), JaCoCo, EasyMock, PIT
- **Operating Systems**: Windows, MacOS, Linux
- **Version Control**: Git, Github, BitBucket
- **DevOps/Automation Tools/Container**: Jenkins, Jira, Docker, Kubernetes
- **Cloud**: Amazon Web Services (AWS), Google Cloud Platform (GCP), Netlify, Heroku, Ngrok
- **Other Key Skills**: OOPS, UML, MVC, REST API, SOA