MADHUSUDHAN AITHAL MAHABHALESHWARA

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EDUCATION

University of Colorado Boulder
MS, Computer Science, May 2021
R V College of Engineering
*BE, Computer Science and Engineering, CGPA – **9.45/10**, May 2017*

PUBLICATIONS

- Gopalakrishnan, Gopakumar, Aithal, Madhusudhan M., & Pasala, Anjaneyulu (2018). Visual Analytics of Organizational Performance Network. *Proceedings of the 23rd International Conference on Intelligent User Interfaces Companion - IUI 18*. doi: 10.1145/3180308.3180333.
- M. R., Anala, Aithal M., Madhusudhan, D. C., Jeevan, & K. R., Kartik (2016). Comparative Study of Computationally Intensive Algorithms on CPU and GPU. *International Journal of Applied Engineering Research*, *11*, 2996–2999.

EXPERIENCE

Specialist Programmer, Expert Track *Infosys, July 2017 – July 2019*

- Developed an end-to-end visual analytics application for the team performance management of the organization, currently being used by various leaders of Infosys. (JavaScript, Node.js, MongoDB)
- Worked on DevOps automation for an employee experience application in Infosys. Used Shell scripting, Docker and Docker Swarm for the deployment of applications and, Prometheus for monitoring. (Docker Swarm, Prometheus)
- Developed an Angular 7 library, for capturing telemetry data in angular applications, which is being used by more than 10 Infosys applications.
- Worked on developing a python module and microservice to convert the natural language query into cypher query language (Neo4J) using Rasa framework. (Python, Rasa, Flask)
- Modeled a knowledge graph in Neo4J containing the entire organizational data of Infosys.

Intern, Expert Track *Infosys, January 2017 – June 2017*

- Developed an application to identify key performers and communities across teams using various network science properties such as centrality indices, and community detection. (JavaScript, Java, and Neo4J)
- Developed a knowledge graph that was used for internal question and answering of Computer science related topics at Infosys.

Intern *Mathologic Technologies, June 2015 - July 2015*

- Worked on building a decision support system to make efficient railway crew links and locomotive links. Developed and implemented heuristics to find efficient crew links, round trips for crews. (Java and MySQL)

PROJECTS

Chat Application with Sentiment Analysis *Aug 2016 – Nov 2016*

- Developed a chat application that could predict the sentiment of messages with the test accuracy of 74%. Used pairwise linear kernel SVM model for the classification of text into positive, negative or neutral. (JavaScript, Node.js, Sklearn).

Newspaper Subscription System *Sept 2015 – Nov 2015*

- Developed web and Android applications where users could buy the subscriptions of various newspapers at a single place instead of going to different websites or newspaper agents. (MySQL, Java, JavaScript)

Hand Gesture Recognition System *Aug 2015 – Oct 2015*

- Developed an application for detecting hand movements. Based on the hand movement, specific operations such as controlling the volume and movements, were performed in applications like VLC media player and games like Pacman. (C++, OpenCV)

Comparative Study of Computationally Intensive Algorithms on CPU and GPU *Jan 2015 - Mar 2015*

- Worked on parallelizing the standard AES encryption-decryption algorithm using CUDA on GPU and compared the results with its CPU implementation. Even with the data of size as small as 1.8 MB, a speedup of nearly 56 times was obtained. (C++, CUDA)

TECHNICAL SKILLS

- Programming languages/Databases: Java, Python, C++, JavaScript, MySQL, Neo4J, MongoDB, Apache Cassandra
- Frameworks/Libraries/Skills: Node.js, D3.js, Angular, jQuery, Spring Boot, Tensorflow, Keras, Sklearn, Docker

ACHIEVEMENTS

- Emerged as Winners and First Runners up in organization-wide hackathons in Infosys, in Mar 2019 and Sept 2018 respectively.
- Secured Best Project award for project “Comparative Study of Computationally Intensive Algorithms on CPU and GPU” in 2015.
- Won second prize in “The Buggers” national-level coding competition, held at R V College of Engineering in February 2015.