

Kumara Sri Harsha Vajjhala

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Education

Master of Science (Computer Science), Iowa State University Expected - Dec 2021
GPA - 3.89

Bachelor of Technology (Computer Science), JNTU, Hyderabad, India June 2014
Percentage - 77.6%

Skills

Languages :	Java (Proficient), Python 3 (Intermediate), C (Intermediate)
Data Structures and Algorithms :	Design, Analysis, Probabilistic Algorithms
Machine Learning :	Theory, PyTorch, Numpy, Pandas, Sklearn
CICD :	GIT, Jenkins, Maven, Yaml
Big Data :	SQL, HDFS, Hive, Pig, Sqoop, Oozie
Web Technologies :	HTML5, CSS3, Spring Boot, Hibernate, REST, XML, JSON

Relevant Employment

Research Assistant, Dr.Wurtele's Lab, BCB Department, Iowa State University May 2020 - Aug 2020

- Added reproducibility logging and playback feature, which logs every major user action on the tool and displays it in the tool in real-time and in a memory-efficient manner
- Worked on adding additional statistical analysis features such as density histogram, differential correlation and differential expression analysis
- Improved execution time for existing statistical analysis features by using efficient algorithms for large datasets
- Enhanced the user interface of the app to include a taskbar for better organization of windows
- Tools and Technologies used : Java, Swing UI, JFreeChart, Eclipse, Sorting and Searching Algorithms, Statistics

Technology Analyst, Infosys Limited, Hyderabad, India Apr 2017 - Dec 2019

- Developed and maintained high availability scheduled jobs and software using a continuous delivery pipeline
- Worked towards automating processes using the best possible tools or custom programs
- Troubleshooted issues in development, test and production environment
- Worked with datawarehouse architects, DBA, and subject matter experts to design and develop software in an agile environment
- Worked with a diverse and geographically dispersed team located in India, Atlanta, and Seattle.
- Technologies used: Java, Python, Shell, SQL, Hadoop Framework (HDFS, Hive, Pig, Sqoop), Unix

Technology Consultant, Hewlett Packard Enterprise, Bengaluru, India

Aug 2014 - Apr 2017

- Develop, unit test and maintain Java-based software assets
- Work with different upstream and downstream teams to ensure smooth testing of any changes or upgrades
- Help the support team in resolving software bugs
- Participate in daily team meetings and contribute ideas

Other Employment

Teaching Assistant (Software Development Practices), Iowa State University

Jan 2020 - Till Date

- Assisted 10 teams of 4 members each, in the completion of their android and spring boot based projects
- Held weekly standup meetings and bi-weekly demos with all the teams
- Answered technical questions and giving suggestions on project architecture
- Graded demos and quizzes

Recent Projects

1. *Deep Neural Network implementation using numPy*

Sep 2020

- Developed a deep neural network program with regularization and adam optimizer using python and numPy library.

2. *MetaOmGraph (MOG) - An exploratory data analysis tool for large expression datasets*

Jun - Aug 2020

- Worked on adding reproducibility logging and various other statistical features to MOG, the open-source data analysis and visualization framework.
- Github - <https://github.com/urmi-21/MetaOmGraph>
- Technologies : Java, Swing, JFreeChart, Statistics

3. *Integrated Datawarehouse DevOps - (Role : Hadoop and Java Developer)*

Apr - Dec 2019

- Worked in a big data ingestion and dispatch pipeline project.
- Automated 600+ ingestion jobs by developing a Data ingestion and export engine, saving revenue
- Technologies: Hadoop, Hive, Pig, Sqoop, Python, Java, Shell

4. *HR Analytics - (Role : Java Developer)*

Oct 2018 - Apr 2019

- Worked on ingestion pipeline of HR Analytics project
- Wrote Audit, Balance and Control (ABC) scripts for data quality checks
- Technologies: Java, Ataccama, SQL

Extra-Curricular Activities

Career Fair Ambassador, Business, Industry and Technology Career Fair

Spring 2020

Computer Science and Engineering club member, Iowa State University