Syed Hamdan Sher

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SUMMARY

- Knowledge of advance level programming in **Java** and **C/C++** including thread synchronization multi-threading , multi-processing, **Object Oriented** Programming and **TCP/IP** socket programming.
- Experienced with **Big Data** Technologies i.e. **Hadoop** and **Spark**.
- Ecosystem such as **HDFS**, Name Node, Data Node and **Map Reduce** programming paradigms.
- Experienced in working with Amazon Web Services (**AWS**) using **EC2** for computing and **S3** as storage mechanism.
- Knowledge of Software Development Life Cycle (**SDLC**) phases like Requirement Analysis, Implementation and estimating the time-lines for the project.
- Working knowledge of **SQL** and databases systems **MySQL** , **MongoDB**.
- Ability to write well-documented, well-commented, clear, and maintainable efficient code.
- Experience in source control management systems (e.g. **GIT**), relational databases, distributed computing (**pthreads, Openmp, MPI**), and Linus OS.
- Strong knowledge in **Machine Learning**, **Data Mining**, **Algorithms**, **Data Structures**, and **Artificial Intelligence**.
- Experience with **Python and Shell scripting** for **Cloud Automation**.
- Good understanding of **NoSQL** databases and hands on work experience in writing applications on NoSQL databases like **MongoDB**
- Experience with **Python** development and Online Social Network Analysis with Twitter API
- Collected data (tweets) on some keyword topic, did some semantic analysis and ML text clustering and classification
- Experience with AWS SDE technologies **Redshift, RDS, S3**.
- Experienced Full-Stack web developer.
- Experience with data visualization tools, Tableau and Python Matplotlib.
- Worked with parallel and distributed programming frameworks, Pthreads, CUDA, MPI.
- Experience with project management tool, MS Projects.
- Good understanding of data structures and algorithms.
- Experience with Android Application Development.
- Strong communication, collaboration & team building skills with proficiency in grasping new technical concepts quickly.
- Highly self-motivated and goal-oriented professional committed to pursuing a long-term career. Ability to follow with projects from inception to completion.

EDUCATION DETAILS:

- **Illinois Institute of Technology, Chicago, IL, USA (GPA : 3.5 / 4)**   **Aug 2016 – May 2018**
  Master of Computer Science (Graduation May 2018)
  Graduate Coursework : Introduction to Parallel and Distributed Computing, Cloud Computing, Advance Database Organization, Advance Operating System, Theory of Computation, Mobile Application Development, Software Project Management, Enterprise Web Application Development, Online Social Network Analysis and Unified Model Language.

- **Visvesvaraya Technological University, Belgaum, KA, India**   **Sept 2012 – July 2016**

  Bachelor of Engineering in Information Science and Engineering
  Undergraduate Coursework : Operating System, Database Management System, Adhoc Networks, Object Oriented Modeling and Design, Data Mining, Computer Networks, Computer Architecture, Data Structures, Algorithms, Software Engineering.

AWARDS AND ACHIEVEMENTS

- Got recognized for my innovative and creative approach towards my internship at Motorola Solutions, Inc.
- Got **Best Technical Skills** certification during a research workshop held at CS department of Old Dominion University, VA, USA.
- Awarded **Valedictorian** of Information Science and Engineering Department Class of 2016 Acharya Institute of Technology
- Received 2017-18 **Rave Award** for being an extraordinary student employee, going above and beyond assigned tasks, and helping to create an enjoyable and productive workplace.
- Hackathon winner. https://devpost.com/software/safetrack

TECHNICAL SKILL-SET :

Programming Languages	Python, C, C++, JAVA, JavaScript.
Web and J2EE Technologies	HTML/HTML5, JSP, Servlet, CSS, JSON, XML, JDBC, REST.
IDEs and Tools	Android Studio, Python Jupyter Notebook, Redshift Database Management Software, Oracle SQL developer, XAMP, Tableau, MS Project Professional, MS Visio Professional
Version Control	Git
Publishing tools	LibreOffice, MS Office, Google apps
Modeling Language	UML
Web servers	Apache Tomcat
Databases	MySQL, MongoDB,
Cloud Platforms	AWS, Chameleon Cloud, Apache Tomcat
Operating Systems	Linux(Ubuntu) and Windows(98/2000/XP/VISTA/7/8/10
Parallel and distributed programming	CUDA, Pthreads, MPI

PROFESSIONAL EXPERIENCE

DATA ENGINEERING INTERN - MOTOROLA SOLUTION INC - CHICAGO, IL, USA   JUNE 2017 – AUG 2017

- Developed several algorithms for generating several data pattern.
- Worked with real time MSI data to build a recommendation engine for recommending products
- Interacted with Redshift Database Management System
- Data Visualization with **Python Matplotlib** and **Tableau**.
- Applied data cleaning, feature engineering and machine learning to design regression models and recommendation engines.
- Environment: **Python 3, Jupyter notebook, MySQL, Redshift DBMS, Tableau.**

RESEARCH INTERN – OLD DOMINION UNIVERSITY – NORFOLK, VA, USA   JULY 2015 – AUG 2015

- Worked on Indoor Localization problem and algorithms.
- Used Gyroscope, Accelerometer and compass integrated in a smart phone to take input reading for a path covered by a person holding the smart phone.
- Used the directions of the movement and a given map co-ordinates to plot path graph on the map using the input parameters from a smart phone.
- Received "The best Technical skill"s certification at ODU, VA, USA.

PROGRAM MANAGER - ILLINOIS INSTITUTE OF TECHNOLOGY – CHICAGO, IL, USA   SEPT 2016 – FEB 2018

- People and event management.
- Promotion and marketing of athletic events

ACADEMIC PROJECT AND RESEARCH

- Benchmark different parts of a computer system, from the CPU, GPU, memory, disk, and network.
- Compute the theoretical memory bandwidth of your memory , Gflops, Iflops and Throughput of CPU , GPU.
- Ecosystem such as **HDFS**, Name Node, Data Node and **Map Reduce** programming paradigms.
- Estimating the Cost of Computing in the Private and Public Cloud (**AWS**)
- Estimate the cost of different configurations for 3 different set of requirements on **d2.8xLarge, r3.large** and **p3.16xlarge**.
- Implementing Tera-Sort using **Shared Memory**, **Hadoop**, **Spark** on 128GB and 1 TB dataset on **i3.large** and **i3.4xlarge** instances
- Compare the performance of the four versions of TeraSort (**Shared-Memory**, **Hadoop**, **Spark**, and **MPI**) on 1 node scale and 8 node scale with both the 128GB and 1TB dataset.
- Design and developed an e-commerce website using **JAVA servlet, HTML, CSS, MYSQL, MongoDB**
- Implemented Napster/Gnutella Style **Peer-to-Peer File Sharing** between distributed Systems using sockets with automatic update of files to central server and a central server or a cluster of central servers directs the traffic between individual registered peers its includes **Multi-threading** and TCP/IP sockets
- Design **Android** application using Android Studio : news application, a notebook application and a stock watch application.
- Building semantic analysis of the tweets collected from social media, Recommending friends by establishing links between people using social media using **Python** i.e. link prediction, text classification and clustering.
- Built and designed storage manager, buffer manager and record manager from scratch using **C/C++** programming language.