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Education

Boston University, Graduate School of Arts and Sciences, USA *Master of Science in Computer Science*, GPA – 4.00/4.00 *Expected December 2023*

Bennett University, Greater Noida, India *Bachelor of Technology in Computer Science and Engineering*, GPA – 3.73/4.00 *August 2016 – June 2020*

Professional Experience

Commvault Systems, Bangalore, India **Software Engineer** *July 2020 – August 2022*

- Led full stack projects utilizing C++, .NET Core, SQL Server, React, and Java.
- Designed and integrated Webhooks for Commvault's alert system within the enterprise architecture, took ownership of the module, and oversaw all changes and reviews.
- Optimized alert systems and syslog modules within the Server team, conserving disk space and boosting performance.

Commvault Systems, Hyderabad, India **Intern** *January 2020 – June 2020*

- Developed full stack projects utilizing Angular JS and Java as part of the Server team.
- Integrated additional settings into Commvault's Command Center, improving user experience.
- Took initiative to automate RESTful APIs using Python and Postman, streamlining processes and increasing efficiency.
- Refined search system in the web app using NLP, enhancing search efficiency and user interaction.

Georgia Institute of Technology, Atlanta **Research Intern** *June 2018 – July 2018*

- Solved minimum spanning tree of a graph using Boruvka's algorithm in a multi-threaded environment.
- Analyzed multi-threaded application performance on 200-core supercomputers, identifying bottlenecks.

Academic Projects

Operator Placement on Edge Systems in Stream Processing

- Collaborated with a team to utilize Raspberry Pi devices by modifying Apache Flink source code to optimize edge offloading for stream processing systems, reducing latency while maximizing resource efficiency.

Scalable Distributed MD5 Hash Matching

- Designed and developed a distributed system for cracking 5-character passwords using MD5 hash matching, featuring a web interface, management service, and multiple worker nodes.

Loan Approval Prediction for Home Mortgages

- Utilized the 2016-17 HMDA dataset to predict loan approval factors for home mortgages using Spark on a Google Dataproc cluster.
- Identified key influences such as gender, race, income, and property type, enabling lenders to make data-driven decisions and enhance profitability while assessing credit risk accurately.

Video Compression using Deep Learning

- Led a team of four to develop a DNN-based video compression model using autoencoders with Keras.

Technical Skills

- Programming languages & web technologies: C++, JavaScript, Python, C#, Java, MEAN/MERN stack, Django, .NET Core
- Information management and cloud technologies: MongoDB, SQL Server, Cassandra, CosmosDB, GCP BigQuery, Dataproc Clusters, Azure Data Factory (ETL)
- Data streaming systems and Big data: Flink, Kafka, Redis, Storm, Hadoop, Spark
- Tools & Platforms: Git, Unix, Docker, Kubernetes