ATUL LAL

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EDUCATION

Bennett University, Greater Noida, India   **June 2020**

Secured a Bachelor of Technology with *Distinction* (CGPA 8.18/10)

Relevant Courses: High Performance Computing, Data Structures, Artificial Intelligence and Machine Learning, Big Data & Business Intelligence, Discrete Mathematical Structures, Information Management Systems

PROFESSIONAL EXPERIENCE

Commvault Systems, Bangalore, India   **July 2020 - present**

Software Engineer

Commvault Backup & Recovery provides enterprise-grade protection and recovery of virtual machines, containers, databases, applications (including cloud), endpoints, and files.

- Worked on multiple full stack projects and applications involving technologies like C++, .NET Core, SQL Server, React and Java.
- Integrated webhook APIs with Commvault's alert system
- Developed upon and optimized multiple alert systems and syslog modules to save disk space and improve performance.

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

Internship

- Worked on multiple full stack projects and applications involving technologies like Angular JS and Java.
- Developed additional settings web applications into Commvault's Command Center.
- Automated restful APIs using Python and Postman

Commvault Systems, Bangalore, India   **June 2019 – August 2019**

Internship

- Worked as full stack developer on various projects in cloud services team in this 13 weeks internship using technologies like MongoDB, Express JS, Node JS and Angular.

Docyt, USA   **February 2019 – August 2019**

Graphics and Communication Desginer

Docyt is a document driven automation system for small business back-offices. It uses AI and machine learning to extract data from docs and automate painful back-office tasks like Accounts Payable.

- Worked as Part time graphics designer responsible for create graphics and UI/UX elements.

RESEARCH EXPERIENCE

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

- Worked on solving minimum spanning tree of a graph using Boruvka's algorithm in a multi-threaded environment
- Tested the multi-threaded application on high performance super computers with more than 200 cores to find bottlenecks and compare performance
- Technologies used: Java

Georgia Institute of Technology, Atlanta   **July 2017**

- Implemented multiple edge detection gaussian based and gradient based algorithms like Sobel, Canny edge and Prewitt algorithms.
- Tested and compared the algorithm and its results
- Technologies used: Python

ACADEMIC PROJECTS

Video Compression using Deep Learning
- Worked on a DNN based model which compressed video files using autoencoders
- A compressed video matrix using vector decomposition, motion estimation and DNN based autoencoders
- Technologies used: Python, Keras, Node JS, React JS

Tiny face detection in the wild
- Worked on Generative Adversarial Network based model which converts low-resolution images to high resolution
- This model was used to increase the resolution of tiny faces and improve accuracy of face detection on thermal images
- Technologies used: Python, Keras

Smart news feed
- Developed a full stack web application to recommend news and articles collected from multiple sources
- Used collaborative filtering to recommend news to users
- Technologies used: Angular, Python, Django REST Framework

Peer to peer messaging application
- Developed an IPFS based peer to peer messaging application
- Created an Android and IOS application
- Technologies used: React Native

TECHNICAL SKILLS

- Multiple programming languages & web technologies like C++, Javascript, Python, C#, Java and MEAN/MERN stack, Django, .NET core etc.
- Information management technologies like Mongo DB, SQL Server, MySQL, PostgreSQL, Cassandra
- Big data analytics using Hadoop, Spark and Pig.
- UI/UX Designing using Sketch, Adobe XD, Photoshop & Illustrator.

EXTRA CURRICULAR ACTIVITIES

- Core member of Google Developer Student Club
- ICMLDS Machine Learning Conference
- Hult Prize organizing team – 2018
- Member of Bennett College festival organizing committee – 2019
- Core member of literary club and photography club