Abhishek Kumar

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EDUCATION

UNIVERSITY AT BUFFALO MS IN COMPUTER SCIENCE

December 2022* | Buffalo, NY | GPA: **3.668 / 4.0**

COURSEWORK: Design and Analysis of Algorithms, Distributed Systems, Deep Learning, Computer Vision, Sports Analytics,

SRM UNIVERSITY B. TECH IN MECHANICAL ENGINEERING

May 2017 | Chennai, TN | GPA: **3.94 / 4.0**

RELEVANT COURSEWORK: Advanced Calculus, Numerical Methods, Robotics, MATLAB, Intro to Programming

SKILLS

(**proficient**) Python, C++, PyTorch, Tensorflow, Keras, SQL, Git, Docker **(familiar)** Flask, OpenCV, Kafka, React, MySql

EXPERIENCE

UNIVERSITY AT BUFFALO | TEACHING ASSISTANT May 2022 – July 2022 | Buffalo, NY

- Guided students to develop deep learning projects for video analysis in the sports domain
- Assisting professor David Doermann in conducting classes and grading student presentations.

INFOSYS | SYSTEMS/SOFTWARE ENGINEER Feb 2018 – Aug 2020 | Bhubaneswar, OD | www.infosys.com

- Developed a plant lifecycle management application for end to end manufacturing management.
- Created invoice correction application for business users in purchasing domain.
- Integrated Google Map API with CUMMINS Global Service Locator application.
- Automated cron jobs to improve process control and increased batch transfer efficiency by 8%.
- Migrated CUMMINS internal applications from Oracle Apex12 to Apex17. Reduced login latency by 20%.

PROJECTS github.com/abhinine4

DISTRIBUTED MESSAGING SYSTEM | Python, Flask, Kafka, Docker, MongoDB, Socket (IP/TCP), HTML

- Developed a full stack publisher subscriber messaging system with event-based routing.
- Designed publish, subscribe, unsubscribe, advertise, de-advertise and notify functionalities.
- Dockerized the multi node application into containers using docker-compose.

TACO DATABASE | C++, Git, Vim, Linux

- Worked on a single threaded mini database system for efficient data retrieval and storage.
- Designed the file manager, buffer manager and page handler using LRU eviction policy.

SOCCER PLAYER RE-IDENTIFICATION | Python, C++, PyTorch, Torchreid

- Developed a soccer player Re-identification model for SoccerNetV2 challenge hosted by Sports Radar.
- Proposed model consisted of a two stream CNN network to learn part features and appearance features separately using pretrained networks and optimized using triplet an Id loss. Ranked 8th in the competition

CERTIFICATIONS

- Problem Solving Using Computational Thinking (Coursera, University of Michigan): Link
- Problem Solving Certificate (HackerRank): Link