Pritesh Kumar Verma

• Sonbhadra (U.P.)-231220 • pritesh0797@gmail.com • (+91) 9026427704 • github.com/priteshvermaa

EDUCATION

ITM University Gwalior (M.P.), India

Bachelors in Technology in Computer Science and Engineering.

(2016 - 2020)

CGPA 8.04

Relevant Coursework: Data Structures and Algorithm, Discrete Mathematics,

Programming, Operating System, Computer Networks, Databases.

Sri Chaitanya Junior, College Vijayawada (A.P.), India Intermediate. Percentage 84.7 (2013 - 2015)

Relevant subjects: Mathematics, Physics, Chemistry, English, Sanskrit

TECHNICAL SKILLS

Programming Languages: C, C++, Matlab, Java, SQL, Python, HTML, CSS, Javascript | Databases: SQLite, MySql |

Frameworks/API: Numpy, Pandas, Matplotlib, Git, Github, OpenMp, LAPACK, CBlas and ML libraries

EXPERIENCE

Dharwad **Indian Institute of Technology** Junior Research Fellow (June 2021 - Present)

Working as a Researcher in the project for solving Mathematical problems using Parallel and distributed-memory implementation for large scale matrices.

Raintree System Incorporated

New Delhi (Mar 2021 - May 2021) **Software Engineer**

Created and designed interactive forms of different categories for the different Hospitals and insurance agencies, both for Raintree's web-client and software. Debugged and fixed the issues of different clients using RSL(Raintree Scripting) and MySQ1.

CSIR-Central Drug Research Institute

Remote

(May 2019 - June 2019)

Performed the Data analytics for the various dataset and managed the data in SQL using various Python libraries.

PROJECTS

HSSPAREIG (To be Published)

Designed and Implemented parallel algorithms for computing eigenvalues and eigenvectors of very large matrices. Computation of eigenvalues and vectors of large matrices could take large computation time in $O(n^3)$. Whereas SuperDC takes only $O(r^2 n(\log^2 n))$.

Tools Used: C++, OpenMP, Lapacke, CBlas, Valgrind, HPC clusters of running programs.

Fast algorithms for hierarchically semiseparable matrices.

Designed and Implemented a Parallel algorithm for storing some rank structured matrices to reduce its size by storing the matrix along a full binary tree. For an O(N^2) size matrix this algorithm only takes O(NLOGN) storage which is a huge improvement in terms of storage.

Tools Used: C++, OpenMP, Lapacke, CBlas, Valgrind, HPC clusters of running programs.

Workshops and courses

- 3D vision summer school IIIT Hyderabad(May, 22 28, 2022).
- Machine Learning specialisation Andrew NG(Coursera)
- 6th Summer School on AI with focus on Computer Vision and Machine Learning (18 July 19 August, 2022).

Leaderships and honours

- Qualified GATE examination twice with more the 90 percentile
- Hack for sport (Hackathon) (Among Top 13 out of 4000), link
- Best caption award for team management.
- NCC (National cadet corps), NCC aims at developing character, comradeship, discipline, a secular outlook, and spirit. I have organised and been part of drives for the better of society.
- Silver medal in 800 metre race (Universities Annual Day).
- Silver medal in Photography (Universities Annual Day).