Abhishek V Joshi

https://jbnerd.github.io

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EDUCATION

BITS PILANI

B.E.(Hons.) Computer Science Expected July 2019 | Pilani, India CGPA: 8.83

LINKS

Github://jbnerd LinkedIn://jb-nerd

COURSEWORK

UNIVERSITY

Parallel Computing Quantum Computing Artificial Intelligence Data Mining Neural Networks and Fuzzy Logic

MOOC

CS 231n [Stanford] CS 224n [Stanford] CS 249 [UCB]

TEACHING ASSISTANT

Computer Programming (Fall 2017, Fall 2018)

Data Structures and Algorithms (Spring 2018)

SKILLS

PROGRAMMING

Strong:

C • Python

Familiar:

Java • C++ • Scheme (Lisp) • Assembly

Frameworks

TensorFlow • PyTorch • Numpy • OpenMP • OpenMPI • Cuda • Git

EXPERIENCE

SAMSUNG RND, BANGALORE | SUMMER RESEARCH INTERN

May 2018 - July 2018 | Bangalore, India

- Modelled and developed a planning system for call allocation and migration in VMs of 5G-RAN
- Paper submitted to IEEE WCNC 2019

PIXXEL | AI TEAM LEAD

Aug 2018 - Present | BITS Pilani, India

• Leading a team of over 20 student members of Pixxel, working in Al for resource planning, forecasting, object detection and semantic segmentation using satellite imagery in a multitude of domains.

BOMBAY STOCK EXCHANGE | SUMMER RESEARCH INTERN

May 2017 - July 2017 | Mumbai, India

 Worked on a mathematical model for dynamic evaluation of periodic price bands on top-gaining penny stocks with encodings for overall market movement.

RESEARCH

STREAMING ALGORITHMS FOR SOCIAL MEDIA ANALYTICS

ADAPT LAB, BITS PILANI | UNDERGRAD RESEARCH STUDENT

Aug 2017 - Dec 2018 | BITS Pilani, India

Worked with Prof. Poonam Goyal on developing an online algorithm for detection and tracking of unanticipated sub-events in tweet streams.

DWARF PARALLEL VIRTUAL MACHINE

ADAPT LAB, BITS PILANI | Undergrad Research Student

Aug 2018 - Dec 2018 | BITS Pilani, India

Worked with Prof. Sundar on designing, specifying and prototyping of a parallel virtual machine for the DWARF compiler [A DSL for data mining].

OTHER PROJECTS

- SemSegSat: Implemented an end-to-end system with an internal U-net for semantic segmentation of road networks, buildings and water bodies from 3-band satellite imagery.
- DeepRL: Implemented the original and policy-gradients variant of Deepmind's "human level control using deep reinforcement learning".
- Path Planning Agent: Designed and implemented a heuristic based online terrain search agent with a local exposure.
- ParaWDI: Designed and implemented a new variant of bloom-join algorithm for parallel construction and query execution of a word-document index for distributed memory model.
- ParallelEdgeReverse: Implemented a parallel divide-and-conquer edge reversal algorithm for sparse directed graphs for shared memory model.

SOCIETIES

2017 Fest Coordinator Coding Club

2017 Treasurer BITSACM (ACM Student Chapter of BITS Pilani)