Shreyas Moudgalya

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EDUCATION

Illinois Institute of Technology, College of Sciences | Aug 2014 to May 2017

- B. S. in Computer Science | GPA: 3.86/4 | Dean's List (Aug 2014 to Present)
- Minor: Applied Mathematics | Specialization: Distributed and Cloud Computing

EXPERIENCE

SPEAR (Systems for Performance, Energy, and Resiliency) Group

Undergraduate Research Assistant, Sep 2016 to Present

- Implemented a power aware window based scheduling plugin to the SLURM Scheduler.
- Integrated a 0-1 knapsack in the PySlurm API on top of SLURM running a Docker CentOS 7.
- This Green computing approach will save over $100 per addition 1MWh used.

Data-Intensive Distributed Systems Laboratory

Undergraduate Research Fellowship, May 2016 to Sept 2016

- Implemented a linear runtime graph partitioning algorithm based on Label Propagation. This was the first ever usage of the algorithm which was written to partition a billion node Graph on GRAPH/Z.

Zookks Incorporated

Software Engineering Intern, Sept 2014 to May 2016

- Worked on the Python backend development using the Flask Framework.
- Designed an ER database model for modelling the domain, implemented an SQL script that creates the database, and Implemented the app to enable a user to store, manipulate, and query the database.

National Instruments

Hardware and Graphical System Design Intern, May 2015 to Sept 2015

- Wrote system software using LabVIEW for Patient Care and Monitoring System Signals.
- Improved the real time patient data processing by 20% using DAQ (MyDAQ and MyRIO).
- Analyzed the Circuit and Power Measurements using NI Multisim and NI Ultiboard.

PROJECTS

iHeartHeart

- Analyzed real time heart beat data to detect heart abnormalities. Built a linear regression model using *numpy, pandas, tinys3, statsmodels, and mathplotlib* of vast amount of continuously changing data.

SmartBar

- Collaborated on implementing a SmartBar App for the Android Platform. SmartBar is a weightlifting bar that can record real time data about a weight lifters workout. The coded mobile app would retrieve the smart bar data and keep track of a lifters workouts/overall progress.

SKILLS

Languages: Java, Python, C, SQL, LATEX, MATLAB, MIPS, HTML/CSS, JavaScript.
Familiar: OpenMP, pthreads, Android, MPI, CUDA, MapReduce (Hadoop), AWS/Azure, Linux, Git, SOAP, REST, Flask.

SELECTED ACHIEVEMENTS

- Finalist, MinneHack 2017 (top 6)
- Selected (top 29) students in the United States to participate in the International Conference for High Performance Computing, Networking, Storage and Analysis (SuperComputing 2016).
- Selected (top 60) to participate in the Pitching Conference of National Conference of the Collegiate Entrepreneurs Organization (CEO)
- Selected (top 7) for Dean Betts' Summer Undergraduate Research Fellowship for a 10-week research with faculty to gain invaluable hands-on research experience.
- Selected as Microsoft Student Partner to represent Microsoft at Illinois Institute of Technology.
- Selected among 120 students over Midwest Region for Campus 1871 [April 8-10, 2016].
- Won Honorable Mention ($200 Cash), CS2050 Big Data Hackathon.