Pranav Thulasiram Bhat

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EDUCATION

University of California, Los Angeles
Masters in Computer Science
Expected December 2017 | Los Angeles, CA

National Institute of Technology Karnataka
Bachelors in Computer Engineering
May 2016 | GPA: 9.51/10.0 | Surathkal, India

EXPERIENCE

Anderson School | Programming Assistant
Fall 2016 | UCLA

- Assisting Prof Ivo Welch with web development and setting assignments for MFE 237A(Corporate Finance).

Google Summer of Code | Student Developer
May - August 2016

- Developed Graft.jl, a graph analytics package with support for SQL-like queries.
- Added increased functionality to Julia's sparse matrix implementation and helped fix a LLVM bug.
- Presented project remotely at JuliaCon MIT.
- Planned the development of a bolt-based driver for Neo4j in Julia.
- https://github.com/pranavtbhat/Gsoc2016

Amazon | Software Engineer - Intern
May – July 2015 | Hyderabad, India

- Worked in the Supply Chain Optimization Technologies team.
- Developed a web service to generate periodic usage metrics of a configuration service.
- Developed a Ruby on Rails web site to visualize the obtained metrics, and helped prevent the over-provisioning of the configuration service during peaks.

TECHNICAL SKILLS

Programming Languages Java • C/C++ • Python • Scala • Julia
Frameworks and Tools R •Hadoop •Spark •Git •NetworkX
Web Development Django •Ruby on Rails •AngularJS • JQuery
Databases and Operating Systems MySQL •DynamoDB •Neo4j

PROJECTS

Distributed Database Systems | Course Project
Fall 2016 | UCLA

- Implemented spark jobs to match each word in a file to its most common bigrams.
- Designing user defined aggregators and external hashing support for specialized mapreduce jobs.
- Technologies used: Hadoop, Spark, Spark-SQL, Spark Streaming

Julia Graphs | Contributor
July2015 - August 2016

- Explored how combinatorial graph algorithms could be implemented for shared sparse matrices, using the Bulk Synchronous parallel model.
- Implemented IPC through matrix transposes in shared memory.
- Built the flow algorithms module for LightGraphs.jl. github.com/JuliaGraphs/LightGraphs.jl

Concat | A catalog for conferences
Januray 2016 - July 2016 | Surathkal

- Contributed to a web site that matches academics to conferences in their research areas.
- Scaled the website horizontally on AWS, using the Elastic Beanstalk, S3 and CloudFront services.
- Technologies used: AngularJS, Django, OAuth2.
- concat.co.in

Remote Trigger Labs | Technical Assistant
January - June 2015 | SOLVE - RT Labs NITK

- Developed an application to continuously monitor the health of remote hosts used by RT Labs, over a period of three months.
- Visualized the log data to help detect patterns of poor latency, downtime and high jitter.
- rtlabs.nitk.ac.in

Sharding Social Databases | Course Project
January - May 2015 | NITK

- Studied various strategies for the allocation of user data in distributed databases.
- Compared the query latencies and load distributions of random sharding with heuristic based techniques such as iterative vertex swapping.
- Published technical report in Social Network Analysis and Mining(SNAM), Volume 5.

Network Simulator | Course Project
June - December 2014

- Designed a patch to incorporate UDPLite into NS2.
- Contributed to a patch to eliminate a bug in the ARED AQM for wireless nodes in NS2.