|  |  |  |
| --- | --- | --- |
| [pranavtbhat@ucla.edu](mailto:pranavtbhat@ucla.edu)  310 - 918 - 5457 | **Pranav Bhat** | [pranavtbhat.me](https://pranavtbhat.me)  [github.com/pranavtbhat](https://github.com/pranavtbhat)  [linkedin.com/in/pranavtbhat](https://linkedin.com/in/pranavtbhat) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Education** |  | | | |  | |
| **University of California, Los Angeles** | | **MS. Computer Science** | **Current** | | | |
| Coursework: Distributed database systems; Statistics programming; Animats modelling | | | |  | |  |
| **National Inst of Technology** **Karnataka** GPA: 9.51/10.0 | | **B.Tech Computer Engineering** | **May 2016** | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Experience** |  |  | | |
| **Anderson School UCLA** | **Programming Assistant** | **Fall 2016** | | |
| * Assisting Prof. Ivo Welch with web development and setting assignments for MFE 237A(Corporate Finance). | | |  |  |
| **Google Summer of Code** | **Student Developer** | **May – Aug 2016** | | |
| [JuliaLang](http://julialang.org/). Mentor: Viral B. Shah   * Developed [Graft.jl](https://github.com/pranavtbhat/Graft.jl), a graph analytics package with support for vertex labelling, metadata and graph queries. Presented project remotely at [JuliaCon-MIT](http://juliacon.org/). * Improved the functionality and performance of Julia’s sparse-matrix search operation, and helped fix a code generation bug. | | |  |  |
| **Amazon, Hyderabad** | **Software Engineering Intern** | **May – July 2015** | | |
| * 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 over-provisioning during peaks. | | |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Technical Skills** |  |  |  |
| **Programming Languages** | **Frameworks and Tools** | **Web Development** | **Databases And Operating Systems** |
| Java; C/C++; Python; Julia | R; Hadoop; Spark; Git; NetworkX | Django; Ruby on Rails; AngularJS; JQuery | MySQL; DynamoDB; Neo4j; Linux; MacOS, Windows |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Projects** |  |  | | | |
| **Distributed Database Systems** | **Course Project** | **Fall 2016** | | | |
| * Implemented spark jobs to match each word in a file to its most common bigrams. * Designing user defined aggregators and external hashing support for map-reduce jobs. | | |  | (Hadoop, Spark) | |
| **Julia Graphs** | **Open Source Contributor** | **July 2015 - August 2016** | | | |
| * Explored how combinatorial graph algorithms could be implemented on 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](https://github.com/JuliaGraphs/LightGraphs.jl) | | |  | (Julia) | |
| **Concat: A Catalog for Conferences** | **Full Stack Development** | **Jan - July 2016** | | | |
| * Contributed to a [web site](https://concat.co.in) that matches academics to conferences in their research areas. * Scaled the website horizontally on AWS, using the Elastic Beanstalk, S3 and CloudFront services. | | | |  | (AngularJS, Django, AWS) |
| **Remote Trigger Labs** | **Technical Assistant** | **Jan – June 2015** | | | |
| * Developed an application to continuously monitor the health of remote hosts used by [RT Labs](http://rtlabs.nitk.ac.in/). * Visualized the log data to help detect patterns of poor latency, downtime and jitter. | | | |  | (Shell script, Python) |
| **Sharding Social Databases** | **Course Project** | **Jan - May 2015** | | | |
| * Studied heuristic based 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](http://link.springer.com/article/10.1007%2Fs13278-015-0274-0) in Social Network Analysis and Mining(SNAM), Volume 5. | | | |  | (NetworkX, Gephi) |
| **Network Simulator** | **Course Project** | **June - Dec 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 | | |  | (NS2) | |