

## Anil Shanbhag (anils@mit.edu, anilshanbhag.in)

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RESEARCH INTERESTS	Database Systems, Big Data Management, Data Mining	
EDUCATION	<b>Massachusetts Institute of Technology</b> <i>First Year Graduate Student, CSAIL</i>	<i>Sept 2014 - Present</i>
	<ul style="list-style-type: none"><li>• Advisor: Prof. Sam Madden</li></ul>	
	<b>Indian Institute of Technology Bombay, INDIA</b> <i>B.Tech (Honors)</i>	<i>July 2010 - April 2014</i>
	<ul style="list-style-type: none"><li>• Major: Computer Science and Engineering</li><li>• Minor: Applied Statistics and Information</li><li>• CGPA: 9.58/10.00</li><li>• Ranked 4<sup>th</sup> out of total 89 students in the department</li></ul>	
ACHIEVEMENTS AND AWARDS	Awarded <b>Institute Technical Color</b> at IIT-Bombay for the year 2012 - 13 for outstanding work in the tech genre; awarded to top 7 out of 8000 total students Secured All India Rank <b>38</b> in IIT-Joint Entrance Exam (2010) among 400,000 students Secured Rank <b>1</b> in Karnataka Common Entrance Test (2010) among 150,000 students. Felicitated by Education Minister, Govt. of Karnataka for the same. Selected in national top 1% in <i>Indian National Physics Olympiad, 2010, Indian National Chemistry Olympiad, 2010</i> and <i>Indian National Astronomy Olympiad, 2010</i> Recipient of the <i>Kishore Vaigyanik Protsahan Yojana (KVPY)</i> fellowship, 2008-2010; awarded to top 125 students from all over the country	
ENTREPRENEURIAL EXPERIENCE	<b>Co-Founder and Lead Developer, Recharge123.com</b>	2011 - 2012
	<ul style="list-style-type: none"><li>• Recharge123 is an online recharge portal which provides a unified interface for mobile and DTH recharges. The portal targeted at merchants had a turnover of over <b>INR 10 million</b> in the first year of operations</li><li>• Developed a robust backend to support 3 level hierarchical (Admin, Distributor, Merchant) model.</li></ul>	
PROFESSIONAL EXPERIENCE	<b>Internship, Microsoft Research, Redmond</b> <i>Quickr: Approximating Big Data Queries</i>	<i>May-Aug 2014, May-July 2013</i> Srikanth Kandula
	<ul style="list-style-type: none"><li>• Worked on application of sampling-based techniques for <i>Approximate Query Processing</i> in <i>Big Data</i> context.</li><li>• Existing work focused on simple queries and specific workloads, the goal was to generalize and approximate complex jobs where possible.</li><li>• Incorporated sampling as a first-class operator in SCOPE (Cascades-based optimizer). Designed new sampling techniques, created transformation rules for commuting sampling operator with other operators.</li></ul>	
	<b>Internship, TU-Braunschweig, Germany</b> <i>RDF Provisioning for the Internet of Things</i>	<i>May-July 2012</i> Sandor Fekete
	<ul style="list-style-type: none"><li>• Worked on bringing wireless sensor nodes into the Internet of Things by having embedded tuplestore for RDF data storage on the nodes and interacting with outside world via Constrained Application Protocol (CoAP)</li></ul>	

- Implemented CoAP protocol for communication between sensor nodes in Wiselib and integrated the setup as a backend into Smart Service Proxy of the **EU SpitFire Project**

### Google Summer of Code 2011

May-Aug 2011

#### Dashed Border Implementation

Fantasai (Org: Mozilla)

- Improved border corner rendering and interaction of dashed style with other border styles
- Designed and implemented variable gap length rendering logic for rendering dashed borders allowing smooth corner transitions. Prototyping done in python followed by patching the source code.

### PUBLICATIONS

#### Optimizing Join Enumeration in Transformation-based Query Optimizers

Anil Shanbhag, S. Sudarshan

40th International Conference on Very Large Data Bases (VLDB-14)

### POSITIONS OF RESPONSIBILITY

#### Manager, Web and Coding Club

2012 - 2013

- Overall Coordinator of one of the largest student clubs with over **1200 members**. Organized **14 events** consisting of a good mix of sessions, competitions and workshops on different programming topics
- Promoted coding as a hobby and a necessary academic skill by creating an informal engaging environment

#### Institute Cultural Web Nominee

2011 - 2012

- Organized cultural activities on IIT-B campus as a part of the 11 member core team
- Created a new **responsive Gymkhana Cultural website**. New initiatives included **online noticeboard** to give over **6000 students** daily cultural updates and separate sites for different genres in cultural

### EXTRA-CURRICULAR ACTIVITIES

Secured **24<sup>th</sup>** position at the Asia Regional Finals of ACM-ICPC 2013 (Amritapuri).

Secured **10<sup>th</sup>** position in Asia Regionals Online Round 2013 (Kharagpur).

Secured **1<sup>st</sup>** place in the Aakash Tablet App Development Contest for developing EduBucket, a Netflix for educational content (Prize Money: \$1500).

Secured **1<sup>st</sup>** place in **Yahoo HackU '12** for developing DriveStack, a cloud based utility app which unified various cloud storage services into one large cloud disk, thereby easing management of storage

Secured **2<sup>nd</sup>** place in **Yahoo HackU '13** for developing Time Glider, a visualization app which finds all mentions of a famous person or event (**entity search**) in news articles and shows them on an interactive timeline

Developed **Dictanote**, a rich text editor with multi-language speech recognition working in browser. The app currently has over **80k users** and lives at [dictanote.co](http://dictanote.co)

Finalist in Business Track in Eureka Business Plan Competition for our idea PeaPod, an affordable computer

Created Singing Electric Arc (plasma speaker) as a part of Technovation. The device used modulated electric arcs generated using high voltages to play music from mobile phone

Awarded NSS Special Mention for contribution towards social activities. Facilitated cloth donation drive and organised rubix cube solving workshop at campus school for the under privileged students