# Raghav Sethi

### **Education**

Institution	Degree	GPA
Princeton University (2013 - 2015*)	<ul> <li>Master of Science in Engineering (M.S.E.) in Computer Science</li> <li>Area: Systems and Networks</li> <li>Advisor: Dr. Michael J. Freedman</li> <li>TA: Advanced Programming, Introduction to Programming Systems</li> </ul>	4.0
IIIT-Delhi, India (2009 - 2013)	Bachelor of Technology (B. Tech.) in Computer Science and Engineering  - Student Representative, Head of Design Team  - TA: Introduction to Programming	9.2

# **Work Experience**

Facebook Inc. Menlo Park, CA (May - August 2014)	<ul> <li>Software Engineer Intern - Data Infrastructure - Realtime Data</li> <li>Shipped reliability improvements and added major functionality to Puma, a realtime distributed stream-processing system that handles ~ 200,000 events/sec and powers 100+ applications at Facebook</li> </ul>
Microsoft Corp. Hyderabad, India (May - July 2012)	<ul> <li>Software Engineer Intern - Microsoft Office - Unified Communications (Lync)</li> <li>Developed graph tools to identify and track usage scenarios and feature coverage during dogfood testing. Automatically identified groups of related features and user flow patterns – helped PMs make data driven decisions on features and UX.</li> </ul>

### **Technical Skills**

Programming Languages	Java, C, Python, C#, Javascript
Tools + Technologies	Git, Node.js, Django, Flask, SQL, MongoDB, AWS, Google App Engine, HTML/CSS, IntelliJ IDEA, Eclipse, Visual Studio, Photoshop, Illustrator

# **Selected Awards**

Princeton University (2014)	'Best Design' and 'Software Top 10' at HackPrinceton 2014
IIIT-Delhi (2013)	'Best All-Round Student Award' - Graduating Class of 2013
Esya, IIIT-Delhi (2013)	'Best App' at Esya Hackathon
Microsoft IDC (2012)	'Best App' at Intern Hackathon
Microsoft, IIT-Delhi (2012)	'Best App' at Windows Phone App-a-thon
Yahoo R&D (2011)	'Most Useful' app at Yahoo! HackU IIT-Delhi
Springdales School (2009)	Principal's Award for Excellence in Computer Science
Govt. of India (2007)	Scholarship: Junior Science Talent Search Examination - All-India Rank 32

# **Selected Projects**

#### Freedupe: Optimizing mobile app traffic through zero-effort deduplication (2014)

Developed an HTTP-based protocol, and an Android library, which along with an Nginx plugin enabled developers to automatically reduce data consumption of their mobile applications by changing a single line of code. Simulations on top Android applications show that 10-15% reductions can be obtained through inter-request deduplication.

#### DiffHistory: Visualizing history being written through Wikipedia edits (2014)

Developed a system that monitors live edits on Wikipedia and correlates these with breaking news articles. The system performs named-entity recognition to identify article geo-locations. Results are displayed on an interactive timeline, where users can visualize how important world events led to changes in Wikipedia articles in a given period of time. Processed streams in realtime using Node.is, Java and Python, and visualized using D3.is

#### Bounced: Delay-tolerant filesharing for low-availability wireless networks (2012)

Designed application-layer protocol and developed client and server applications for a filesharing network that intelligently replicates requested files to increase availability.

#### What's Next Up: Reducing information overload by leveraging social signals (2011)

Developed a web application using the Google App Engine/Java stack. What's Next Up is an entertainment event aggregator, recommendation and filtering service. It offers a dead-simple way to easily view a personalized schedule of new movies, books, music and TV shows. Has 1800+ users and some press: (http://www.whatsnextup.com/)

#### RightFare: Empowering autorickshaw passengers using simple geographic services (2010)

Designed a simple system to help passengers determine the approximate autorickshaw fare between any two geographic locations using SMS. Developed into a commercial product: (http://www.ideophone.in/products/sms/)

### **Publications**

Raghav Sethi, Naved Alam, Mayank Pundir and Pushpendra Singh. **Bounced - Improving Data Availability through Replication in P2P Networks**, In Fifth International Conference on Communication Systems and Networks, Bangalore, India. *(2013)* 

Denzil Correa, Ashish Sureka and Raghav Sethi. **WhACKY! - What Anyone Could Know About You from Twitter**, In Proceedings of the Tenth Annual Conference on Privacy, Security and Trust (PST), Paris, France. (2012)