## Rohan Kshirsagar

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EDUCATION

Duke University, Durham NC

2009 - 2013

BSE Computer Engineering, BS Computer Science

GPA 3.53

EXPERIENCE

## Software Engineer at Bloomberg LP

July 2013 - present

Artificial Intelligence and NLP Research Team

- Technical owner of the News Extraction and Headline Generation Product. Interfaces with product stakeholders, plans and implements enhancements for UI, Engine, and Metrics. Investigates high-profile issues related to Earnings releases and Economics releases.
- Overhauled Rule-Writing Application for News Extraction System to adapt to a Webkit based UI. Regularly worked with rule-writers to make workflow significantly more efficient as well as reduce the number of bugs by a large margin.
- $\bullet$  Improved Data Extraction Latency by 70 % by adding in smart activation and caching to the data-extraction algorithm.
- Conducted novel research on Network Monitoring ASIC Chips. Implemented a n-gram language model using regular expressions to see a 3x gain on smaller sized language models. Automated experiments and visualization on various corpora. Reversed Engineered langid.py to implement Language Identification on the Accelerated Hardware chip to see a 6x performance gain. Research published as a short paper in ACL 2015
- Lead on Accelerated Hardware Extraction migration which handles conversion of hundreds of thousands of regular expressions, cross-packet matching, and out of order submission.
- Developed a statistical Location Algorithm for Table Understanding Project. Trained an SVM model using libsvm to identify relational tables in HTML documents, based on work by Cafarella et al.
- Developed a news-wide smart grep adaptor which could search through news tasks log files with smart date and time ranges

## Software Engineer Intern at Barclays

June 2012– August 2012

Portfolio and Analytics Team (POINT)

- Led the development for an iPad app for POINT in a team of 3. Focused on backend and authentication.
- Built a RESTful Web Service for a portfolio/index analytical tool (POINT) in Java. Implemented ability to load user's portfolios, indices, and reports as well as the ability to run market structure reports on any portfolio or index.

Software Engineer Intern at Parakinetics (Stealth-mode startup) June 2011- August 2011

- Worked with 4 senior research engineers to develop a multicore browser application using Java and C++ (POINT)
- Ran benchmarks to compare Single-core app vs. Multi-core app to present to potential investors/venture capitalists
- Wrote algorithm to automate parallelization of the DOM in the Android Webkit Framework
- Helped edit two research papers on Parallel Computing for Princeton Computer Science Liberty Research Group

LANGUAGES

Computer: C/C++, Python, Javascript, SQL, Unix

Human: English (native), Spanish (basic), Marathi (fluent), Hindi (beginner)