Rohan Kshirsagar

CONTACT INFORMATION

32 Rachael Drive
Morganville, NJ USA

+1 732 857 4254
rohank12345@gmail.com

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**
NLP Group

- Developed Structural Analysis (inferring semantic parent-child relationships in tables) within Table Understanding & Extraction Project. Created a tagging methodology for structural analysis, and yielded .93 F1 Score using syntactic and lexical features as well as nonlinear combinations on a linear model.
- Developed Smart Row Matching within Table Understanding & Extraction Project. Defined the problem, introduced weakly supervised gold data set, and developed statistical models using SVMs and Random Forests for determining the financial meaning of the given row of the table.
- 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.
- 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.
- Improved Data Extraction Latency by 70 % by adding in smart activation and caching to the data-extraction algorithm.

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++`
- Ran benchmarks to compare Single-core app vs. Multi-core app to present to potential investors/venture capitalists

CONFERENCE PAPERS

Kenneth Heafield, **Rohan Kshirsagar**, and Santiago Barona. Language Identification and Modeling in Specialized Hardware. ACL, Beijing, China, July, 2015.

LANGUAGES

Computer: `C/C++, Python, Javascript, SQL, Unix`
Human: English (native), Spanish (basic), Marathi (fluent), Hindi (beginner)