Madhur Kapoor

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Education

- **Master of Science in Computer Science** — University of California, San Diego, CA
  GPA:3.87/4 — *Expected: Dec '16*

- **Bachelor of Engineering in Computer Science** — PES Institute of Technology, Bangalore
  GPA:9.44/10 — Top 6% of CSE '14 batch — *Sep '10 – May '14*

Experience

- **Yahoo Inc.** — *Sunnyvale, CA*
  Intern, Technical II — *June '16 – Sept '16*
    - *Built an ad-inventory forecasting model for guaranteed ads based on stochastic streaming algorithms (sketches) which had a 3-fold improvement (accuracy, disk-space, infrastructural simplicity) over the existent sampling based system.*
    - *Collaborated directly with the tech lead and architect on this project which culminated with a paper submission in Yahoo! Tech Pulse 2016. [Hadoop, Pig, Oozie, Java, Sketches]*

- **San Diego Supercomputer Center** — *San Diego, CA*
  Graduate Student Researcher - Delphi Project — *Jan '16 – June '16*
    - *Analyzed census-level data across 5 years to aid public health officers in data-driven policy-design decisions. My work was funded by the Robert Wood Johnson Foundation.*
    - *Developed a data pipeline for extracting the most meaningful factors affecting health outcomes like diabetes and life expectancy and their evaluation by comparing them from a theoretical stand-point. Involved similarity analysis, feature engineering/selection schemes and predictive analytics. [Hadoop, Pig, Java, Python, Pandas, Scikit]*

- **Qulinary** — *San Jose, CA*
  Part-time Freelancing Software Engineer — *Dec '15 – Feb '16*
    - *Implemented an on-demand route optimization service for real-time driver tracking, and to suggest an optimal order of traversal to drivers and aid them in package deliveries [JS, Angular.js, Leaflet.js, Ionic-Cordova, MongoDB]*

- **Citrix R&D** — *Bangalore, India*
  Software Test Engineer I — XenDesktop Division — *July '14 – July '15*
    - *Developed Personal Virtual Disk and Personalization product line automation from scratch up to 42% [PowerShell]*
    - *Designed and implemented UPM Troubleshooter (released as a hotfix), for customers and admins to debug their UPM setup which significantly reduced the round-trip-time for addressing customer issues [MSSQL, C#]*

- **Artoo** — *Bangalore, India*
  Software Engineering Intern — *June '13 – Aug '13*
    - *Engineered an Admin dashboard to track the activity of the field agents and incorporated a lazy module loader into the application to significantly improve the boot-time [Ember.js, Require.js, Mocha, Chai.js, CouchDB]*

Projects

Distributed File System: Implemented a distributed file system from scratch powered by a self-made RMI Library to support remote calls. Supported operations include CRUD files, naming, auto-replication, locking to ensure consistency. [Java]

Perfecting Passenger Pickups - An Uber Case study: Predicted the top pick-up zones at any given hour, using 6 months of Uber pickup data from NYC. Also analyzed top night-life zones and holiday trends as per Uber [Python, Scikit, JS, D3]

Realtime Handwritten Content Collaboration: Implemented a handwriting based collaboration framework that enables multiple remote parties to collaborate using pen and paper in real-time. [Java, OpenCV, Android]

Skills

- Proficient with Java, Python, C++
- Hadoop, Pig, Oozie, Spark, Docker, Kafka
- JavaScript & MVC frameworks in JS (Angular, Ember)
- PHP, PowerShell and basics of Node.js
- Functional Programming - Haskell
- MySQL & basic MongoDB
- Mobile Development with Ionic and Cordova
- Windows and Linux Internals