# SHREYYAS VANARASE
## 1 West Street, New York NY 10004

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MS Computer Science graduated December 2015 with extensive experience in full software development lifecycle from requirements analysis, design, development, testing, and deployment. Strong leadership and communication skills. Proficient in developing full stack web applications and in Linux OS, Java, JavaScript, Python, D3.js, Processing.js, C, MATLAB, Tableau, Node JS, Express, Android Apps.

## EDUCATION

**Georgia Institute of Technology**, Atlanta, GA                          May 2015 – December 2015
*Masters of Science in Computer Science*
  GPA: 4.00

**Georgia Institute of Technology**, Atlanta, GA                          January 2013 – May 2015
*Bachelors of Science in Computer Science*
  GPA: 3.82 – Highest Honors

## PROFESSIONAL AND RESEARCH EXPERIENCE

**BMW Part-Picking Optimization Research**, Atlanta, GA                          January 2015 – May 2015
*Student Researcher*
- Developed innovative solution using Google Glass to optimize BMW's vehicle part-picking assembly process.
- Proposed potential savings of $25,000,000+ across BMW warehouses based on our alternative scanner design research.
- Delivered interactive design by gamification of the routine assembly process.
- Conducted weekly meetings with BMW managers and associates to provide updates on the iterative prototype.

**JPMorgan Chase**, New York, NY                          June 2014 – August 2014
*Application Development Intern*
- Developed SmallTalk programs for Kapital, JPMorgan's primary risk management application, to solve the top 10 client-facing problems.
- Optimized numerous developer tools in Kapital and enhanced usability of GUIs.
- Headed project to integrate all USD futures curves into a single, unifying generator to price US trades more efficiently.
- Performed numerous P&L analyses on new features added to Kapital to minimize MTM variance.
- Reduced the time required for newcomers to gain familiarity with Kapital by 75% through creative & intuitive tutorial.

**Twitter Distributed Tracing Systems Research**, Atlanta, GA                          January 2014 – April 2014
*Student Researcher*
- Led the analysis of web-app trace management using Zipkin, Twitter's distributed tracing system.
- Built framework to run traces for any application using Zipkin to identify latency bottlenecks.

**GE Transportation**, Melbourne, FL                          May 2013 – August 2013
*Onboard Systems Engineering Intern*
- Led the evaluation of a critical GPS differential correction problem for AMTRAK and GE's China trains.
- Coded JAVA parsing program to run locomotive simulations by performing data cleaning on millions of GPS coordinates data.
- Refined electrical schematic designs for Caltrain's chief computer system, Ethernet switches & braking systems.
- Conducted communications, display, and usability testing for GE's Australian locomotive display units.

**Big Drum**, Atlanta, GA                          July 2012 – August 2012
*Search Engine Marketing Intern*
- Practiced SEO, PPC, and link building; employed effective online website diagnostic analysis tools.
- Applied Search Engine Marketing (SEM) tactics and utilized various aspects of website and design analysis.

## LATEST PROJECTS AND DATA ANALYTICS EXPERIENCE

**TwitterTicker – Twitter-Based Stock Price Visualization System**          May 2015 – August 2015
- Developed faceted design using D3.js to analyze effects of a company's tweets on that company's stock price.
- Designed system so users can discover correlations between favorite keywords and increases in stock price.
- Led the data gathering, data cleaning, and development of core application architecture.
- Performed sentiment analysis on 20,000+ tweets for Google, Apple, IBM, Amazon, Intel, and Microsoft.
- Created stock timeline view using NVD3.js/JQuery/HTML/CSS using previous 8 years' stock price closing data from Yahoo Finance.

**Information Visualizations**                                             May 2015 – August 2015
- *SPLOMS* – Designed Tableau SPLOM vis to analyze the most salient vehicle attributes consumers consider during car purchases.
- *Dashboards* – Designed Tableau dashboard displaying change over time in US presidential political party distribution in Georgia counties.
- *Co-occurrence Networks* – Constructed Alluvial vis to analyze character relationships through co-occurrence network in Romeo & Juliet.

**Formation – Location-based Group Meeting Visualization System**          January 2015 – May 2015
- Developed Android app to accelerate the group meeting process and to manage events efficiently by location-based communication.
- Built Node JS/MySQL backend to handle web requests for event management, group messaging, and location monitoring.
- Implemented Google Maps API to display individuals' locations in real-time and to quickly navigate to team members' locations.

**Distributed Computing Systems with Raspberry Pi**                       August 2014 – December 2014
- Created 8-node Raspberry PI cluster to test aggregated cluster performance against standard laptop and desktop performance
- Used Hadoop-based benchmarking algorithms (WordCount, TeraSort, PageRank, SysBench) to analyze performance of varying sized clusters
- Optimized cluster performance by varying parameters such as block sizes and DFS replication

## QUALIFICATIONS, PROGRAMMING, AND ACHIEVEMENTS

- *Qualifications:* US Citizen - Eligible to work in United States
- *Programming:* Java, JavaScript, Python, D3.js, C, Matlab, Android, Google Glass, Processing.js, Node JS, Express, SQL, HTML5/CSS
- *Achievements*: Highest Honors – Highest level of academic distinction for undergraduate degrees at GaTech
  Faculty Honors – Recognition for 4.00 GPA at GaTech multiple times
  Second Degree Black Belt in Kensho-Ryu Kenpo Karate Style