Ravish Chawla

3900 Riverlook Parkway, Unit 104, Marietta, GA, 30067 Phone: (678) 332 – 6565 Email: rchawla@gatech.edu Site: www.ravishchawla.com

<u>Objective</u>: To obtain experience in areas of Computer Science through a position that expands my real-world experience and tests my skills and knowledge to the greatest extent.

Education:

Georgia Institute of Technology - Atlanta, GA

(2012 - present)

- Candidate for Bachelor of Science in Computer Science
 - o Threads: Information Internetworking and Devices
- GPA: **3.77/4.0** (overall)

Southern Polytechnic State University - Marietta, GA

(2011 - 2012)

• GPA: 4.0/4.0 (overall)

Work Experience:

Zynga – San Francisco, CA

 $(May - Aug\ 2014)$

Software Engineering Intern

- Completed development of backend tools for load balancers and server management across clusters
- Implemented an automated feature by leveraging push notifications for a live game that delivers custom in-game commodities to a target set of daily users
- Gained experience in PHP, JavaScript, and ActionScript.

Skills and, Knowledge

- Programming in Assembly, C, PHP, HTM, CSS, JavaScript, Python, Java, C#, Android, and XNA
- Programming in SQL and Knowledge of relational, Big Data, NOSQL Databases, and Data Mining ETL Processes
- Knowledge of Computer Networking principles, with Socket programming, Networking Stack implementation, and the P2P Architecture
- Design Practice on Important Algorithms based on Dynamic Programming, Graph techniques, and P/NP
- Financial Accounting

Project Experience

- Published multiple **Apps** on the **Google Play Store** for Android
 - o Greenbook, an app that allows users to manage monetary transactions
 - App used the Parse backend service to store data in the cloud, and monetized through Google's AdMob platform
- Implemented Page Rank using Map Reduce in Hadoop, to process the Wikipedia page-links dataset and Twitter-MemeTracker dataset.
 - The Page Rank algorithm ranked popularity of websites based on incoming hyperlinks to the site. The data collected from the Map Reduce implementation was then evaluated against an Apache Giraph implementation to compare algorithms based on memory and speed.
- Developed a **Java application** called GTPort which acts as a portal for students and professors for managing personal and grading profiles
 - o Application involved designing a database using Java that implemented the PHP-MySQL Database System
- Developed a BitTorrent protocol program in **C#** able to download and upload torrents from a secure tracker while handling packet corruption and parallel **TCP** connections.
- Developed several games in C for a Gameboy system that used Direct-Memory-Access (DMA)
- Developed various games in XNA with C#, that had XBOX-360 Controller support
- Programmed and implemented important **Algorithms** and **Data Structures** in Java and C, such as **Graph-Based searches**, **Hash-Map Tables**, and **Linked Lists**
- Developed programs to run preset and randomized simulations on algorithms for Calculus and Linear Algebra in C#
- Will have experience on how to build and design a **Rest API**, and use one with native mobile apps, by the end of this semester.
- Developing a Web App as a project, that will use the **AngularJS** Frontend framework, a **NodeJS** Backend framework, and **Amazon Web Services** (S3 Cloud storage and **DynamoDB NoSQL database**).

Research Experience

- Researched and wrote a paper on the current study and development in **ETL Workflow Optimization** used for **Data Warehousing**
- Researched and wrote a Technical Paper on a new **NOSQL** technology called **ArangoDB** comparing it to well established systems such as **MongoDB** and **CouchDB**
- Conducted a research project on Cloud-computing, its risks, and its importance in today's society
- Researched and wrote a Technical Paper on Infrared encoding techniques used in remote devices

Other Activities

 Have participated in the Mathematical Association of America-SE-2012 Math Jeopardy as part of the official Team for Southern Polytechnic State University