



# JAMES ROHAN GANGAVARAPU

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## PROFILE

Georgia Tech Masters in CS student currently seeking new opportunities and challenges in Software Engineering. I am specializing in Computing Systems. My academic areas of interest include Computer Science, Statistics and Economics.

I have worked on mobile, web and networked applications. Some of my notable accomplishments include: only undergraduate selected to represent GSU CS department at HackGSU(MLH) as a hackathon judge, selected to be ACM GSU chapter Webmaster and elected as the lead Full Stack Web Developer for the Computer Science Club.

I've successfully completed internships at LexisNexis, Results Companies and the Indian Institute of Management in fields from Software Engineering to Data Science.

I am currently seeking Software Engineering opportunities in Backend Systems.

## EDUCATION



**Georgia Institute of Technology, Atlanta, GA**

— MS CS

August 2018 - May 2020

Specialising in Computing Systems



**Georgia State University, Atlanta, GA**

— Cum Laude, BS CS, Math Minor

2013 - 2017

CS GPA: 3.94/4.0

Specialised in Software Systems along with a Minor in Mathematics

## SKILLS

PROGRAMMING LANGUAGES: Java, Python, C, C++, R, JavaScript, PHP

WEB FRAMEWORKS: jQuery, AJAX, SOCKETS, HTML, CSS

DATABASE: SQL (SQL Server, MySQL, MariaDB)

OS: Linux, Windows

VERSION CONTROL SYSTEMS: Git

## EXPERIENCE

### Georgia Tech, Atlanta, GA – GTA CS-6515 and CS-4540

January 2019 – Present

- Graduate Teaching Assistant for for CS 6515: Graduate Algorithms and CS 4540: Advanced Algorithms
- Conduct recitation, grade exams, design and grade assignments

### LexisNexis, Atlanta, GA – Technology Intern

May 2019 – July 2019

- Software Engineering Intern, automated Service Level Agreements (SLA's) discovery for the Service Management Group
- Authored and presented a whitepaper arguing for the need to standardize SLA contracts to the CTO of LexisNexis

### Results Companies, Atlanta, GA – Application Development Intern

May 2018 – July 2018

- Part of a multinational Software Engineering Team in a Scrum setting
- Designed the user notification system for custom ERM system (private web app), used by the company's 20,000 employees around the world.

### GSU Library CURVE, Atlanta, GA – Student Assistant

August 2018 – December 2018

- Recognized for my work by the Associate Dean

### ACM GSU, Atlanta, GA – Webmaster

May 2017 – December 2017

- Selected to be the Webmaster, responsible for online member management, co-recruiting, and co-organizing events, increased recruitment by 60%
- Only undergraduate selected to represent ACM and GSU CS department at HackGSU(MLH Hackathon) as a hackathon judge
- Co-organized ACM events and workshops. Assisted in organizing HackGSU

### Computer Science Club GSU, Atlanta, GA – Lead Full Stack Web Developer

May 2017 – December 2017

- Elected to be the lead full stack web developer, responsible for online member management and organizing events

## PROJECTS

### **POMODORO RESTful API** – CS 6301 Adv. Software Engineering

May 2019

- Developed Microservices based RESTful API for Pomodoro backend in CS 6301 Advanced Software Engineering. Jenkins(CI/CD), Flask and Marshmallow (Python), JUnit, SQLite, Git

### **DYNAMO KEY VALUE STORE** – CS 6210 Adv. Operating Systems

May 2019

- Implemented Dynamo [DeCandia et al.] using consistent hashing, gRPC, eventual consistency, and high availability using replication

### **FLAT FILE SYSTEM** – CS 6210 Adv. Operating Systems

April 2019

- Implemented a flat file system that offers persistence and crash recovery guarantees using recoverable virtual memory

### **CREDITS BASED CPU SCHEDULING ALGORITHM** – CS 6210 Adv. O.S.

February 2019

- Implemented User Level Threads library using a credits-based CPU scheduling algorithm. Report: [tinyurl.com/y5xwzxl5](http://tinyurl.com/y5xwzxl5)

### **TINY FILE SERVICE** – CS 6210 Adv. Operating Systems

February 2019

- Tiny File Compression Service using snappy compression for system processes, using POSIX IPC and Shared Memory

### **CONTACTS RESTFUL API** – CS 6301 Adv. Software Engineering

February 2019

- Built a Microservices based RESTful API for a Contacts Application

### **A\* Search Algorithm** – Personal Project

December 2018

- Developed A\* search algorithm to solve N-Puzzle problem, using Priority Queues and Java

### **Distributed Hangman Game**

November 2018

- Developed an application layer protocol for a multi-threaded Client-Server, multi/single player Hangman game using Sockets and Java

## **Percolation Threshold, Monte Carlo Simulation** – *Personal Project*

March 2018

- Implemented an Algorithm to estimate the Percolation Threshold of an NxN grid using Monte Carlo Simulation, Quick Union Find data structure, Java

## **Multi User Grocery List, Android** – *Team Lead*

August 2017 – December 2017

- Created a Multi User Grocery List Android App using a remote MySQL database, Android SDK, Android Studio, GitHub and Waterfall

## **Conway's Game Of Life**

September 2017

- Simulated Conway's Game of Life using JQuery, HTML, CSS

## **Virtual Travel Agent, Web Application** – *Team Lead*

August 2017 – December 2017

- Created a Web based Virtual Travel Agent (HTML, CSS, PHP, JavaScript, jQuery, MySQL). Implemented a User System, that could book flights, reserve parking, rent cars and track purchases

## **Machine Learning Project** – *Team Lead*

August 2017 – December 2017

- Predicted Missing Gene Microarray Data using PCA, imputed and classified new instances, of another 5 different Datasets using PCA and Random Forest in R

## **Hotel Management System**

August 2017 – December 2017

- Implemented a reservation system, employee database, inventory management with partitioned levels of employee system access. Waterfall, MVC design pattern, Git, UML, Java, JavaFX and SQLite database