SACHIN HANUMANTHA REDDY

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EDUCATION

- Master of Science in Computer Science, University of Southern California (January 2018 – December 2019)
- B.E in Computer Science, Ramaiah Institute of Technology, India (September 2011 – June 2015)

COURSEWORK

Analysis of Algorithms, Web Technologies, Information Retrieval and Search Engines, AI, NLP, Advanced Game Design and Development

SKILLS

Languages	Java/J2EE, Python, C++, C	**Web Technologies**	AngularJS, NodeJS, HTML5, CSS, PHP, jQuery, JSON
Frameworks	Angular, TestNG	**Cloud Technologies**	Google Cloud Platform, Amazon Web Services
Databases	MySQL, MongoDB	**Test Automation**	Appium, Selenium, SauceLabs, Perfecto
Other	Solr, Android, REST API, Git, JIRA, Jenkins, Bamboo, BDD, CI/CD		

WORK EXPERIENCE

Software Engineer, Honeywell Technology Solutions, India|(*Java,Appium,TestNG,Perfecto,SauceLabs,BDD)* (August 2015– November 2017)

- Automated mobile app features such as Geofencing, Alerts and Push notifications, Temperature regulation etc. across Android and iOS platforms to control Thermostats and other Home-kit devices installed at home and buildings.
- Created Unit and Functional test cases using **BDD**, automated using **Java**. Enhanced a custom **TestNG** framework to achieve 80% reusability. Achieved 90% test code coverage and test accuracy with robust and reliable results.

Software Developer Intern, Honeywell Technology Solutions, India | (*Android, MySQL, PHP, REST-APIs)* (March 2015 – July 2015)

- Developed and showcased an Android app **CARS (Centralized Access Request System)** with a dashboard for manager-level employees to view requests and pending actions.
- Built app, database and services to view hierarchy involved in list of requests along with details. Integrated an alert system with **Push Notifications** to remind managers to take necessary timely actions. The app was used by Honeywell internal ACS domain employees.

Student Nokia Developer, Nokia, India | (*Android, HTML5, PHP, OAuth, REST-APIs)* (June 2014 – July 2014)

- Formulated an Android application with an interface to write complaint and rate issues along with Google maps to pin-point location to be considered for pollution and environmental issues.
- The app was part of Nokia Store applications.

PROJECTS

Travel and Entertainment Search | (*AngularJS, AJAX, HTML5, CSS, PHP, Bootstrap, jQuery, JSON, REST-APIs, Android)* (March 2018 – May 2018)

- Developed a web application hosted on **AWS** for getting a list of places such as Cafés, Museums, Bus Stations, Schools etc. within a certain radius of user specified location and inputs. The app is used to get ratings, user reviews, place details for any selected place from **Google and Yelp APIs** with **NGINX** server setup as a reverse proxy server.
- Android app with similar backend services was developed. Features such as favorites, sorting user reviews were added.

Game Search – Adversarial Search | (Python, Minimax and Alpha-Beta Pruning Algorithms*)*

- An Artificial Intelligence based implementation to solve the problem of Safe Parking LA (SPLA) and Los Angeles Homeless Services Authority (LAHSA) to accommodate maximum number of applicants from a common applicant pool, per day and for a week while the picked applicants for each of them satisfy their respective constraints.

Search Engine | (Java, Python, Solr, Lucene, Apache Tika, Google PageRank, HTML5, CSS*)*

- Built a web interface to duplicate the functionality of a typical search engine (E.g. Google) for a processed data set of documents. The application comes with an added functionality of Autocomplete to display the related suggestions for the user query, Spell correction and an option of viewing the results according to the Google's Page Rank algorithm.

InvertedIndex | (*Java, GCP, Hadoop Cluster – Map-Reduce)*

- Cleaned and parsed huge data sets to create inverted indices for every word occurrence in the data pool. Used Hadoop Map-Reduce to map each of the word as a key using Mapper and created index for every word as a document id with respective frequency of that word in that document using the Reducer.
- The implementation was used to study the data distribution among different documents in the large data pool.

Data Visualization with Spatial DB | (*PostgreSQL, Google Earth, kml, JavaScript)*

- Visualized spatial data with PostgreSQL queries by creating convex hulls for the map coordinates taken as input through kml files. Used JavaScript to represent the same with an Epitrochoid. The visualizations were verified using Google Earth.

AWARDS AND EXTRA CURRICULAR

- **SILVER AWARD (Honeywell)** Helped team with 90% test coverage for the Jasper product to release on time without hurdles.
- **STAR AWARD (Honeywell)** Implemented CI/CD to make end-to-end automation testing possible on a daily build basis for Lyric product.
- Conducted Android beginner workshop hosted by IEEE, SIT, India. Led a team and trained 30+ students with a hands-on session.