

# Sravani Garapati

## Software Engineer

### Contact

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### Skills

**Programming Languages:** Proficient in C++, Python, Javascript, Erlang, C and Java. Familiarity with Go

**Android App Dev:** Experience in building Android applications using Android Studio, Java, Python, JavaScript

**Debugging:** Adept at identifying and debugging bugs and resolving technical issues

**Web-Applications:** Hands-on experience in building software applications in Django-Python, JavaScript, HTML5, CSS3

**Platforms:** Node.js, Azure

**Databases:** Proficient in MySQL, PostgreSQL, MongoDB

**Agile Development:** Certified in SAFE Agile Practices

**Others:** Git and GitHub, Bitbucket, Confluence, Slack, Jira

### Projects

#### LL(1) Parser and Lexical Analyzer - Compiler Construction

Created from scratch a DFA-based Lexical Analyzer that recognizes some of the basic lexemes and implemented LL(1) parser to parse the lexemes generated by a Lexical Analyzer.

Our Algorithm Traverses and generates the parse tree or the sequence of tokens from the stack.

The final program reads a string of lexemes and validates the string by using Parse Table and implementing a stack to perform the Shift Reduce Transitions on states.

#### Deep Learning for Time Series Analysis

A **subsampling** technique was used to extract landmarks and identify the recurring pattern in ECG by assuming zero noise. Used **Switching Autoregressive HMM** method was used to partition the ECG time series in which each datapoint (xt) is predicted from the previous datapoint (xt+1) using a **Bayesian Regression model**. Finally implemented six models, namely:

- LSTM
- Bidirectional LSTM
- Dropout with Bidirectional LSTM
- Stacked Multi Bidirectional LSTM
- Bidirectional LSTM with Multihead Attention
- Transformers and Multihead Attention

and compared their performance as well to work without noise cancellation, obviating the need for smoothing and saving information loss.

### Education

(Aug 2018 - July 2022)

**Bachelors in Engineering**

**Birla Institute of Technology and Sciences, Pilani**

**Graduated in B.E. Computer Science & Engineering**

### Profile

- Highly motivated and skilled software engineer with over 1 year of professional experience seeking a challenging position to contribute to the development of innovative software solutions
- Proficient in Django REST Frameworks, C++, Python, JavaScript, Erlang, SQL & web development
- Well-versed with the Software Development Lifecycle (SDLC) right from requirement analysis, documentation coding and testing to maintenance of proposed applications
- Excellent Knowledge of software engineering principles and best practices
- Effective in developing solutions for given technical specifications; installing application software and deploying customizations; contributing to code reviews
- Successfully contributed to the design & development of various software projects
- Possess exceptional communication, analytical and problem-solving skills to work in a multi-cultural environment along with team management

### Core Competencies

- **Backend Development**
- **Android App Development**
- **Data Structures and Algorithms**
- **Object Oriented Programming(JAVA)**
- **Automation Testing**
- **Web-Application Development**
- **Unit Testing and Code Coverage**

### Work Experience

July 2022 - May 2023

#### GreyOrange Pte. Ltd. (Software Developer Engineer)

Worked in the core team of GreyOrange that handles the movement of robots in the warehouse. The complete Microservice-based operating system handles charging, safety, task assignment, and navigation of robots for pick-up and drop operations in the warehouse

##### Key Result Areas:

- Developed a Multiple Server-Client Application that can accommodate multiple users (>50) in **Javascript, Expressjs and WebSockets** on the **NodeJs** platform
- Implemented Bidirectional communication protocol and handled multiple user messages using WebSockets
- Contributed and worked on maintaining the Robotics Warehouse Automation Model to Automate the Audit Process on the Inventory Transactions run on the Inventory using the Bot-Server Model
- Resolved around (>20) **Bugs** in the system, raised while processing Inventory Transactions to amend the code and workflow
- Coded for **25%** of the Automation Test Cases in **Pytest** for Automating the UI Dashboard Operations
- **Deployed EUnit Test Cases and Common Tests in Erlang/OTP** to ensure functionality and provide a means of verification for refactoring efforts, hence **increasing the Code Coverage by 20%** to support the implementation and automated execution of the AUDIT Flow
- Tech Stack: **JavaScript, NodeJS, Expressjs, Erlang, Pytest, Python, Postgres, MySQL, Mnesia**

June - Dec 2021

#### Licious Delightful Gourmet Pvt. Ltd (Software Developer Intern)

- Worked with product and design teams to own the end-to-end features, including designing the architecture, data storage, and API integrations.
- Developed Headless CMS to manage the Banners and Campaigns, built using Model Forms and implemented **CRUD Operations and Role Based Access Control using Django-Python Framework**, and designed UI from scratch using Django HTML templates enabling Scripting and HTML5.
- Tech Stack: Django, Python, Docker, MySQL