

# Sai Pranavi Neerudu

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## Education

**Master of Science**, Oklahoma State University  
Computer Science | **3.66 CGPA**

08/2022 – 05/2024 | Stillwater, United States

**Key Courses:** Computer Architecture, Operating Systems, Data Structures and Algorithms, and Formal Language Theory.

**Bachelor of Technology**, MLR Institute Of Technology  
Computer Science Engineering | **8.59 CGPA**

07/2017 – 05/2021

**Key Courses:** Computer Networks, Data Mining and Data Analysis

## Skills

### Programming Languages

C, C#, C++, Core JAVA, Python, HTML 5, CSS, JavaScript, MySQL, NoSQL, PostgreSQL, PHP, Groovy, Ruby, jQuery

### Technical Competencies

Containerization (Docker), Customer Experience Enhancement, Application Design, Shell Scripting

### Developer Tools/Frameworks

Android Studio, Git, Eclipse, VSCode, Spring boot, IntelliJ IDEA, MATLAB, AWS, XML, JSON, React, Typescript with GCP, maven, JIRA, JUnit, Jenkins, Tableau, MySQL, React

### Operating Systems

Linux, Windows

## Professional Experience

**Graduate Research Assistant**, ISS, Oklahoma State University

05/2023 – present | Stillwater, United States

- Spearheaded the development of the ISS website using Java and managed data
- Managed digital forms and addressed inquiries, showcasing strong communication skills and exceptional service.
- Leveraged Tableau skills to create intuitive and interactive data visualizations that facilitated a clear understanding.
- Utilized MySQL to extract, transform, and load (ETL) data from various sources, ensuring data accuracy.
- Developed and executed SQL queries to extract relevant information from databases, optimizing data retrieval and analysis.

**Graduate Research Assistant (Android Application Developer)**,

01/2023 – 08/2023 | Stillwater, United States

App Center, Oklahoma State University

- Developed Java-based Android applications aligning with client needs, practicing agile methodologies.
- Collaborated with Git for secure version control and code reviews, contributing to CI/CD delivery processes.
- Managed project tasks strategically, ensuring timely delivery, issue resolution, and documentation, while streamlining organizational processes for proactive execution and strategic issue resolution.
- Developed efficient and extendable software solutions, contributing to the design and implementation of Low Latency trading applications.

**Software Engineer - JAVA**, Tata Consultancy Services

07/2020 – 08/2022 | Hyderabad, India

- Played a pivotal role in designing and optimizing secure Java software applications and data APIs, utilizing object-oriented analysis to ensure efficiency, and excelled in debugging, performance optimization, and comprehensive issue resolution.
- Executed rigorous unit testing, showcased expertise in development methodologies, UML design patterns, and integration standards, while efficiently overseeing software packaging and release for seamless deployment.
- Developed user stories and maintained test scripts to align development with project objectives.
- Developed applications using APIs, CLIs, and SDKs, with proficiency in AWS services and cloud providers.
- Managed the entire Software Development Life Cycle, ensuring project progress maintaining comprehensive code.

## Projects

**Image Based Plant Disease Detection Using Deep Learning**

03/2021 – 06/2021

- Engineered a Convolutional Neural Network (CNN) model from scratch to tackle plant disease identification.
- Implemented advanced image processing techniques for effective feature extraction.
- Utilized Python and TensorFlow for model development, training, and validation.
- Ensured model robustness and generalization by implementing data augmentation strategies.

**Smart Agriculture (Using BigData Analytics to give crop suggestions)**

08/2020 – 01/2021

- Collected and integrated diverse data sources, including weather data, soil quality data, historical crop yield data, and satellite imagery, into a unified data repository. We utilized tools like Snowflake, MySQL, and ETL processes to ensure data accuracy and consistency
- Played a key role in developing and fine-tuning the crop recommendation algorithm. This algorithm analyzed historical data, current conditions, and farmer preferences to suggest the most suitable crops for cultivation.

## Research Paper

"Big Data Analytics based Smart Agriculture," 2021 6th International Conference on Communication and Electronics Systems (ICCES), Coimbatre, India, 2021, pp. 534-537, doi: 10.1109/ICCES51350.2021.9489196.

## Achievements

Achieved 6 Star Gold Badge in Problem Solving(Algorithms)

Secured ALL INDIA 1101th rank in Round 1 of CodeVita 2021

Certified in Problem Solving, C++ and Java in HackerRank.

Solved 500+ programming questions from CodeChef, LeetCode, HackerRank etc.