

# Shanmukh Krishna Boddu

+1 (669) 240-8611 | [shanmukhkrishnab459@gmail.com](mailto:shanmukhkrishnab459@gmail.com) | [Portfolio](#) | [GitHub](#)

## Experience

### Software Engineer – NCR Corporation, India

Oct 2020 – Dec 2021

- Collaborated with 4 other Engineers and developed a self-service web application using Django and React which helped the organization reduce manual effort by 80%.
- Worked on front-end development using HTML, CSS and JavaScript and Python for server-side backend business logic implementation.
- Delivered user support services via Service Now ticketing system for Atlassian tool stack (Jira, Confluence, Jira Align), Artifactory and WhiteSource and achieved a user satisfaction rate of 98%.
- Implemented CI/CD workflows using GitHub Actions, reducing deployment time by 75% and improving overall development efficiency.
- Designed database solutions aligned with business objectives and implemented ETL pipelines, Stored Procedures, triggers, and performance tuning techniques resulting in 35% improvement in system performance and efficiency.

### Software Engineer Intern – NCR Corporation, India

Jan 2020 – Sep 2020

- Collaboratively developed a full stack application using ASP .NET (C#) to implement robust backend server operations and HTML/CSS/JavaScript for interactive and responsive user interface.
- Utilized JUnit for unit testing, leading to a notable 5-hour per week reduction in testers' workload.
- Leveraged Jira for bug tracking, successfully identified and resolved 15-20 bugs, ensuring improved software quality, and reducing potential business impact by 25%.

### Database Engineer – Artha Solutions, India

Jul 2019 – Aug 2019

- Designed and implemented scalable relational database management systems including Oracle, MySQL, PostgreSQL.
- Employed performance optimization, query tuning and index optimization to improve system efficiency and reduce response time by 30%.
- Created an ETL pipeline using data tools and Python to load user data from a database, displaying it on a Confluence page for document statistics, significantly improving readability.

## Academic Projects

### Airport Management System

Aug 2022 – Dec 2022

- Collaborated with team members and implemented an airport management system using - Python (Django), SQLite, and HTML/CSS, that enabled personnel to oversee flights and assets, allowing customers to access information and make bookings.
- Developed and deployed a flight price prediction feature using an ensemble method (Random Forest), achieving 96% accuracy.
- Executed role-based authentication using Django's user authentication system, resulting in an 80% reduction in unauthorized access and a 99.9% uptime upon successful deployment on PythonAnywhere cloud platform.

### Plant Disease Classification using Deep Learning

Aug 2022 – Dec 2022

- Created DenseNet model for plant disease classification achieving 97.4% accuracy.
- Implemented a web-based user interface for the plant disease classification model using Flask and ReactJS.
- Pre-processed a large-scale plant disease image dataset, including image augmentation and normalization, to improve model performance and generalization.

## Publication

- Published a research paper on Human Age and Gender Estimation using Support Vector Machine (SVM) in [ICACECS International Conference](#).

## Education

**M.S., Software Engineering** – GPA: 3.6/4.0

Expected Graduation: Dec 2023

**San Jose State University** – San Jose, CA, USA

### Related Coursework

Data Structure and Algorithms, Object-Oriented Programming, Operating Systems, Software Engineering Processes, RDBMS, System Design, Machine Learning, Deep Learning.

## Skills

**Programming Languages:** Python, Java, C#, C, C++

**Web Technologies:** HTML, CSS, JavaScript, TypeScript

**Frameworks/libraries:** Django, React, ASP.NET, Flask, NodeJS, Spring Boot, Scikit-learn, Tensorflow, Pandas, Numpy, Matlab

**Tools:** Tableau, VS Code, IntelliJ, Git, Postman, Artifactory, Jira, Confluence, Bitbucket, Jenkins, Docker, MS Office

**Databases:** MSSQL, PostgreSQL, MongoDB, MySQL, Oracle, Hadoop, SQLite.

**Cloud Technologies:** AWS, Azure, GCP, Linux, Heroku

## Extracurriculars

- **Instructional Student Assistant** – San Jose State University

Aug 2022 - Present