# Aadithya Kandeth

+1 352–(709)-2395   aadithya97.github.io    linkedin.com/in/aadithya-kandeth    github.com/Aadithya97 **aadithya9788@gmail.com**

## EDUCATION

**University of Florida (Scholarship – Achievement Award)  (GPA – 3.7/4)**  **Aug 2022 - May 2024**
*Masters in Computer Science*

**SRM Institute of Science and Technology (GPA – 87.62/100)**  **July 2015 - May 2019**
*Bachelors in Information Technology*

## SKILL SET

**Programming:** C#, .NET, Python, Java, WPF using MVVM, WCF, NUnit Test Framework, SQL, SQLite, OpenCV, Debugging/ RCA, Agile, MVC, Angular, HTML/CSS, Javascript, Web Services, Big Data, Machine Learning, Data Engineering, Linux, Entity Framework, Azure, C/ C++, XML, JSON, TypeScript
**Tools:** Visual Studio, Google Colab, Jupyter Notebooks, Git/GitHub, Postman, Trello, Microsoft Office, Notion, Hadoop, Docker, Jira, TFS, Tableau

## EXPERIENCE

**Siemens Healthineers**  **July 2019 – Aug 2022**
*Software Engineer/Developer (R&D – Molecular Imaging)*
- Collaborated with a cross-functional, international team of 12 to develop software for operating PET and SPECT medical scanners using .NET and its related technologies, including WPF and WCF in C# in an agile environment.
- Spearheaded the API and backend development for over 14 functional components along with their corresponding frontend UI at the hardware/software interface, including scan range calculation, scan visualizer and quality check tools.
- Applied clean coding principles and automated unit tests using Nunit, covering over 90% of the codebase, reducing QA time by 20% and minimizing product defects prior to release. Identified and fixed over 150 bugs during development through rigorous testing procedures.
- Delivered high-quality products on a bi-weekly release schedule through Azure cloud DevOps pipelines with a defect rate of 1 per KLOC, while mentoring 3 new developers on code reviews and testing workflows in TFS to ensure skills growth.

*Software Engineering Intern (R&D - UltraSound)*  **Jan 2019 – May 2019**
- Improved code quality and increased overall test coverage to 85% for the calculation and measurements module of an ultrasound scanner, reducing product defects by 20% in diagnostic reports generated for patients.

**Wipro Limited**  **June 2018 – July 2018**
*Data Visualization Intern*
- Utilized Tableau to create visually appealing dashboards that analyzed sales data, resulting in more informed managerial decision-making and a reduction in sales wastage costs by 10%.

**The Last Mile Consultants Pvt Ltd**  **June 2017 – July 2017**
*Big Data Intern*
- Implemented a Big Data testing environment and established a Hadoop cluster across 15 systems for efficient big data processing, resulting in a 30% reduction in storage costs.

## PROJECTS

**Applications and Software**  **Oct 2022 – May 2023**
*Technology/Languages: Erlang, Distributed Systems, Actor Model, HTML, CSS, Angular, .NET, Entity Framework, SQL Server, SignalR, Git, TypeScript, JWT*
- Built a twitter clone where users could register, login, create and share tweets using a web client that communicated with a server that ran on a distributed computing system to increase efficiency.
- Set up a social networking website for authenticated users to connect with their friends through messages and images using a .NET framework back-end and Angular front-end.
- Engineered a Jira clone with full CRUD functionality using Angular for the frontend and integrating with a .NET API backend. Enabled user management, project tracking, and drag-and-drop issue management.
- Conducted a comparative study on Brute Force, Greedy, and Dynamic Programming algorithms to optimize residential planning based on tree density in a real estate project to gain insights on algorithm run-time, efficiency and analysis.

**Intelligent Traffic Management System**  **Jan 2018 – May 2018**
*Technology/Languages: IoT, Image Processing, Python, openCV, ThingSpeak Cloud*
- Devised and executed a solution that effectively managed traffic flow at intersections by adjusting traffic light timings based on the volume of vehicles in each lane. The algorithm leveraged the power of the ThingSpeak cloud, which seamlessly integrated a real-time CCTV feed and employed advanced image processing to accurately count the number of vehicles.

**Deep Learning Projects**  **Aug 2022 – Dec 2023**
*Technology/Languages: Python, Machine Learning, Jupyter Notebooks, Deep Learning, Web Scraping, Data Engineering, Deep Learning*
- Achieved outstanding results with a U-NET model that accurately segmented MRI scans to detect brain tumors with a remarkable 87% success rate, leveraging key features such as the tumor area, type and modality.
- Predicted global social unrest using 8 different models including Random Forests, KNN, HMM, TabNet, XGBoost, Graph Neural networks, and the OpenAI GPT LLM trained on the GDELT dataset to support rapid emergency service deployment and efficient governmental decision making.

## ACHIEVEMENTS

- Published a paper on traffic control system utilizing CCTV cameras for dynamic traffic light adjustment (IJET-UAE, ICARESM:2018).  **July 2017**
- Received the academic achievement scholarship at UF for maintaining academic distinction.  **September 2023**
- Obtained over 4 SPOT awards and a DC excellence award for exemplary performance at Siemens Healthineers.  **July 2019 – Aug 2022**