

# AVINASH PITTU

+1 352-709-9520 | [avinashpittu@ufl.edu](mailto:avinashpittu@ufl.edu) | [linkedin.com/in/avipittu/](https://www.linkedin.com/in/avipittu/) | [github.com/avinashpittu](https://github.com/avinashpittu) | [avinashpittu.netlify.app](https://avinashpittu.netlify.app)

## EDUCATION

### University of Florida

*Masters in Science (M.S), Computer Science, CGPA: 3.70/4.00*

Gainesville, FL

05/2024

**Relevant Coursework:** Advanced Data Structures, Distributed Operating System Principles, Analysis of Algorithms, Machine Learning, Mathematics for Intelligent Systems, Data Structures, Real-Time Systems, Object-Oriented Programming, Embedded systems, Computer Networking

### Sastra University

*Bachelor of Engineering (B.E), Computer Engineering, CGPA: 3.72/4.00*

Thanjavur, India

05/2020

## TECHNICAL SKILLS

**Programming Languages:** .Net Core(C#), Python, Java, C++, C, JavaScript, HTML, CSS, R, Dataweave

**Frameworks and Libraries:** React JS, Spring, Spring Boot, Spring JDBC, Node JS, Express, Django, Git, Numpy, Pandas, SoapUI, Rest Web Services

**Databases:** MySQL, PostgreSQL, Salesforce(Test Environment), MongoDB

**Other Tools:** Interfaces(Github), Operating Systems(Windows, Linux), Amazon Web Services, MS Office suite, ServiceNow, JIRA, Visual Studio, Anypoint Studio, IntelliJ, Eclipse, Agile Methodologies, Jupyter, Postman, PyCharm, Java Messaging Service, QGIS tool, Rstudio, Cell Profiler, Qupath

**Cloud:** MuleSoft Certified Developer Level 1

## PROFESSIONAL EXPERIENCE

### University of Florida Health

*Software Engineer under Prof. Dr. Loic Deleyrolle*

08/2022 - Present

*University of Florida*

- Developing and improving machine learning models for analyzing and quantifying cancer cells utilizing **R** and **Python**.
- Created Professor research dynamic website using **MERN stack**, ensuring current information on projects, publications, and lab members.
- Successfully troubleshooted and resolved software-related issues, providing technical support to researchers, resulting in a 20% improvement in overall research efficiency.
- Collaborating cross-functionally with research teams to enhance product capabilities and address software-related challenges.

### Tekplanit

*Software developer Trainee*

05/2023 - 08/2023

*Remote*

- Engineered efficient **ETL processes** for seamless integration, facilitating real-time information syncing and updating 3000+ records in just 5 minutes, thereby decreasing manual effort by 80%.
- Integrated with the **Anaplan** and **Informatica** platform to ensure accurate daily updates for 1000+ companies, saving 3 hours daily. Implemented real-time accuracy via scheduled Linux server runs in the **Akamai cloud manager**.
- Automated **web scraping** from OIG Exclusions site using Selenium, optimizing data collection processes for 1000+ records.
- Employed dynamic browser manipulation to achieve precise screenshot capture and streamlined information retrieval.
- Collaborated cross-functionally to implement real-time accuracy via scheduled **Linux** server runs in the Akamai cloud manager.

### Tata Consultancy Services

*Software Engineer*

07/2020 - 08/2022

*Hyderabad, India*

- Designed and supported **Full Stack Web applications** and **Microservices** tailored to client requirements, leveraging **Java, Spring Boot, MuleSoft, Python**, and other technologies. Recognized with the TCS Project Excellence Award for outstanding contributions, leading to a 25% improvement in project execution efficiency.
- Implemented Test-Driven Development (TDD) in 80% of modules, reducing post-release defects by 30%.
- Contributed to the development of the Replay web application framework, incorporating **React, Spring Boot, and Java**, and seamlessly improved operational efficiency by 20% through the successful transition of data from **MySQL**.
- Developed and maintained **Mule ESB** applications, leveraging **Anypoint Studio and Anypoint Platform**.
- Utilized **AWS DevOps** and Automation tools for efficient **CI/CD** deployment processes, optimizing workflows.
- Optimized applications, achieving a 15% increase in rendering performance with 100% deadline adherence.
- Improved code coverage and readability, enhancing overall code quality and maintainability.
- Demonstrated strong interpersonal skills through effective collaboration with a geographically distributed team.
- Mentored new hires, fostering skill development and knowledge transfer for increased project output and team productivity.
- Successfully engaged with 3 clients in diverse environments, resolving software integration issues in testing and production.

### Tata Consultancy Services

*Back-end Engineer*

01/2020 - 04/2020

*Hyderabad, India*

- Designed a **Python Django** based e-commerce web application with **Amazon S3, Heroku, Git, and MySQL**, significantly increasing sales revenue.
- Implemented an automated email campaign system with Python and MySQL, facilitating personalized content delivery and performance monitoring.
- Documented the development process for future reference and knowledge transfer.

## PROJECTS

### Replay Operations Monitoring Tool | Java Springboot, Java Messaging Queue, React, MySQL and AWS

Tata Consultancy Services

- Developed a full-stack web application called Replay for operations monitoring, hosted on AWS EC2. Utilized MySQL, React, and Java Springboot, enabling manual message reprocessing and aiding the operations team and clients in tracking messages. Integrated with MuleSoft and Java MQ for B2B message tracking.
- Utilized Amazon Web Services including RDS, CodeCommit, and EC2 for storage and hosting, providing a robust and scalable solution for operations monitoring and message tracking.

### Mobile App for tracking Alcohol Behaviour | Xamarin, C#, Google Places API

<https://github.com/avinashpittu/Projects/tree/Sipsmart>

- Engineered a feature-rich mobile application with 5 pages - login, signup, real-time alcoholic behavior monitoring, goal tracking, and a personalized dashboard, showcasing strong engineering skills and a focus on user-centric solutions.
- Incorporated advanced location tracking using Google Places API, enhancing user safety by sending timely alerts every 30 minutes when detecting an alcoholic consumption environment.

### Implementing GAN using Python | Tensorflow, Keras, Numpy, Matplotlib, CV2, OS

- Orchestrated the comprehensive development of a cutting-edge Generative Adversarial Network (GAN) architecture tailored to the task of synthesizing number images leveraging the renowned MNIST dataset.
- Utilized TensorFlow to craft a generator model incorporating fully connected and transposed convolutional layers. Strategically engineered to convert random noise vectors into precise 28x28x1 images, ensuring high-fidelity output.