

# Yatri Patel

Chattanooga, TN | [yatripatel.1609@gmail.com](mailto:yatripatel.1609@gmail.com) | [www.linkedin.com/in/yatri-patel](http://www.linkedin.com/in/yatri-patel) | <https://yatri1609.github.io/>

Detail-oriented Software Engineer with 3+ years of experience in programming, statistical analysis, advanced analytics, machine learning, and mathematical optimization. Skilled in SQL, Python, and R, with a strong foundation in quantitative reasoning, problem-solving, driving data-driven decisions and developing predictive models. Passionate about continuous learning to stay abreast of emerging tools and technology in data analytics.

## WORK EXPERIENCE

### **Tennessee Valley Authority** (05/2022 – Present)

Software Engineer - Product Delivery

Full-time

- Applied analytical and problem solving skills to identify and resolve complex P6 user and data issues using SQL, ensuring seamless operation of critical systems.
- Contributed to modernizing and enhancing efforts for existing MuleSoft integrations in line with P6 upgrade initiatives.
- Collaborated with stakeholders and cross-functional teams to develop and establish standards for MuleSoft applications at TVA.

### **Tennessee Valley Authority** (09/2020 – 05-2022)

Intern - Technical Training and Innovation

Internship

- Delivered hands-on workshops to over 50 individuals, showcasing reinforcement learning with AWS DeepRacer and Misty the Robot, sparking innovation and tech enthusiasm.
- Completed development of multiple one-pagers to educate non-technical individuals on new technologies, leading to enhancing overall company innovation and competitiveness.
- Facilitated interactive Misty the Robot experiences for 100+ enterprise wide attendees, contributing to the successful launch of TechX and enhancing emerging technology awareness.
- Led development and deployment of a reporting dashboard using statistical analysis on Chattanooga Road Accidents data to showcase the abilities of tools like Tableau and PowerBI.

### **Center for Urban Informatics and Progress** (09/2019 - 02/2021)

Undergraduate Student Researcher

- Led operations research project to optimize public transit by predicting ridership and developing models that leverage machine learning algorithms and simulations.
- Coordinated stakeholder meetings, resulting in comprehensive data collection and feedback, ultimately ensuring project alignment with objectives.
- Implemented advanced analytic techniques, including mathematical optimization and predictive analytics, to enhance ridership prediction accuracy, ultimately supporting more effective data-driven decision making for local decision makers.
- Analyzed and visualized energy usage of buildings and vehicles, creating an algorithm that assigns vehicles to buildings based on location, size, and land-use characteristics.

## EDUCATION

### **Master of Science - MS in Analytics**

Georgia Institute of Technology ~ 08/2023 - Present

### **Bachelor of Science - BS in Computer Science: Data Science**

The University of Tennessee at Chattanooga ~ 01/2019 - 12/2021

## CERTIFICATIONS

### **AWS Certified Cloud Practitioner** ~ 07/2023 - 07/2026

Amazon Web Services (AWS)

## PUBLICATIONS

- **Ridership Prediction of New Bus Routes at Stop Level by Modelling Socio-economic Data using Supervised Machine Learning Methods** ~ 01/2021  
Transportation Research Board 100th Annual Meeting
- **Data Analysis and Visualization of Traffic in Chicago with Size and Landuse-Aware Vehicle to Buildings Assignment** ~ 12/2020  
Smoky Mountains Computational Sciences and Engineering Conference
- **Meet the Next Generation of Cybersecurity Women** ~ 10/2020  
ISSA Journal
- **Public transport optimization** ~ 04/2020  
UTC Research Dialogues

## SKILLS

### **Technical:**

Advanced Analytics, Data Analytics, Data Science, Machine Learning, Mathematical Modeling, Mathematical optimization, Predictive Analytics, Python (Programming Language), R (Programming Language), SQL, Statistics, Tableau, Data Visualization

### **Non-technical:**

Communication skills, Problem Solving, Quantitative reasoning, Research Writing