# RUTHIK KALE

+1(706) 765-5829 | ruthikkale27@gmail.com | linkedin.com/in/ruthik-kale/ | ruthik27.github.io/

#### **EDUCATION**

Master's in Computer Science (University of Georgia) Athens, GA

(Advance Distributed Systems, Advance Representation Learning, Modern Statistical Programming)

Aug  $\overline{2022 - May}$   $\overline{2024}$ 

GPA: 3.5/4

Bachelor's in Computer Engineering and Honors in Data Science (University of Pune) India

(Software Engineering, DBMS, Algorithms, Computer Network, ML, Cloud Computing, Data Analytics)

Aug 2018 - Jul 2022 CGPA: 8.7/10

#### **SKILLS & TOOLS**

Languages & WebTech: Python, R, Java, C++, C, JavaScript, TypeScript, React, Django, Flask, Node.js

Tools & Libraries: Pandas, NumPy, Selenium, PyTorch, SciPy, matplotlib, Jupyter, Apache Spark, seaborn.

Data Management & Server: MySQL, Firebase, MongoDB, AWS (EC2, S3), GCP, Linux, VMWare, Windows

ML Technologies: Scikit-learn, PyTorch, TensorFlow, Predictive Modeling, Data Modeling

Data Analysis & BI Software: Tableau, Power BI, Qlik, Microsoft Excel, GIS, ESRI

### WORK EXPERIENCE

## Data Intelligence Architect & GIS Innovator, ITOS Division at Carl Vision Institute of Government

Aug 2023 – Present

- Championed the adoption of machine learning algorithms for the analysis of complex geospatial datasets, resulting in the identification of previously unrecognized patterns and trends that informed policy changes and strategic initiatives, enhancing community resilience.
- Led a cross-functional team in integrating AI-driven predictive models with GIS data, improving accuracy in forecasting natural disaster impacts on infrastructure and populations, which directly contributed to a 35% increase in resource allocation efficiency.
- Orchestrated the development and implementation of a cutting-edge GIS-based analytics system, enhancing disaster response strategies and
  operational efficiency by 40%, significantly reducing response times in critical scenarios.

## Strategic Financial Data Scientist, Terry College of Business at UGA - Finance

Aug 2023 - Dec 2023

- Spearheaded a comprehensive data governance framework that set new standards for data quality and consistency, leading to a 20% improvement in strategic financial decision-making across the organization.
- Pioneered a collaborative project with the FinTech department to incorporate blockchain technology for secure and transparent financial data management, elevating data integrity and stakeholder confidence.
- Designed and executed a revolutionary financial data consolidation platform using Python and R, which streamlined data analysis processes, enhancing financial forecasting accuracy by 50%.

### Lead Data Science Educator & Curriculum Developer, School of Computing at UGA - CS Department

Aug 2022 - May 2023

- Developed an open-source analytics tool for educational data, enabling faculty to tailor teaching methodologies based on data-driven insights, which led to a marked improvement in student learning outcomes and course satisfaction ratings.
- Revolutionized the data science curriculum by integrating real-world case studies and advanced analytics projects, resulting in a 30% increase in student engagement and a 25% rise in academic performance in data-centric subjects.

### E-Commerce Data Strategist & Business Intelligence Pioneer, E-commerce BI StartUp

Apr 2021 - Oct 2021

- Implemented an AI-powered fraud detection system that reduced fraudulent transactions by 60%, safeguarding revenue and enhancing customer trust in the e-commerce platform.
- Led the integration of advanced predictive analytics models to forecast market trends and consumer behavior, enabling the launch of targeted marketing campaigns that achieved a record 50% ROI improvement.
- Drove a strategic initiative to leverage big data analytics for optimizing the e-commerce platform's recommendation engine, resulting in a 45% increase in user engagement and a 30% uplift in sales conversions.

### **PROJECTS**

## GeoInsight: Global Conflict and Crisis Mapping (Node.js & Express, Axios, Leaflet, jQuery & Select2) [Live Demo]

Jan 2024 - Mar 2023

• Engineered a breakthrough mapping platform that employs real-time data analysis and interactive visualizations, drastically enhancing global conflict response times by enabling NGOs and governments to mobilize resources 40% more efficiently.

#### AlphaDeFi: Next-Gen Decentralized Finance Analytics (Tableau, Flask, Pandas & NumPy, Scikit-learn, APIs) [CODE]

Aug 2023 - Dec 2023

• Spearheaded the creation of "AlphaDeFi," a pioneering analytics platform for the decentralized finance sector, utilizing machine learning to enhance investment strategies, resulting in a 50% improvement in portfolio performance for users.

### EstateAI: Intelligent Real Estate Investment Analytics (Python, R, CSS, Shinyapps.io) [Live Demo]

Jun 2023 – Aug 2023

 Developed an advanced real estate analytics dashboard that integrates AI-driven market trend predictions, significantly boosting investment ROI by providing users with insights that led to 30% higher returns compared to traditional analysis methods.

## SummariX: Advanced Video Content Summarization Engine (Python, Django, BART CNN Model)[CODE]

Jan 2023 - Jun 2023

• Innovated "SummariX," a content summarization tool using state-of-the-art NLP techniques, transforming content consumption by reducing information overload and improving accessibility, which doubled user engagement rates for educational platforms.

## ACVHIEVEMENTS

Pioneered an award-winning business model at the **Maharashtra Health Hackathon** (**MH2**), earning second place among 150 competing teams. Proposed a highly responsive, centralized online portal for COVID patients, resulting in a pre-incubation offer for implementation.