

Naveen Ramachandra Reddy

Assistant Professor | Adjunct Instructor
Graduate Teaching Assistant | Data Engineer
Associate Consultant | Software Developer

Email: namacha@clarkson.edu

Phone: +1 (315)-244-9606

[linkedin.com/in/naveen-ramachandra-reddy-085538291](https://www.linkedin.com/in/naveen-ramachandra-reddy-085538291)

Objective

I completed a master's degree in data science and am eager to expand my knowledge, and technical and managerial skills in real-world applications. I aspire to leverage my academic background and hands-on experience as a Graduate Teaching Assistant to contribute to innovative data-driven solutions within a dynamic organization. Also seeking an opportunity to work on challenging real-time problems in the technologies, where I can implement the knowledge, skills, and experience I have gained over these many years in AMDOCS and NORTHERN TRUST for the betterment of organizations and personal growth.

Summary of Expertise

Data Engineering Intern with over six months of experience in ETL, SQL, Python, and cloud technologies. Experienced Software Developer and Associate Consultant with 7.5 years in the IT industry. Worked as Associate Consultant at Northern Trust Corporation, the BANKING industry for about 2.5 years in the field of Application development and have experience of about 5 years as a Software Developer at Amdocs Development Centre India Private Limited, the TELECOM industry in the field of Software development and maintenance.

Currently working as an Assistant Professor in the Department of Data Science at Clarkson University, responsible for teaching graduate and undergraduate courses in data science, including data analytics, data warehousing, probability and statistics, machine learning, and programming. Involved in curriculum development, student mentoring, and academic research support.

Experience

Assistant Professor

New York | United States

CLARKSON UNIVERSITY

July 2025 – Till Date

- Instruct undergraduate and graduate-level courses in the courses Data Mining , Information Visualization and Probability & Statistics, fostering analytical thinking and data literacy.
- Designing and delivering comprehensive course materials, assessments, and hands-on projects to support diverse learning styles and enhance student engagement.
- Mentoring students on independent and collaborative research projects, guiding them in formulating research questions, data analysis methodologies, and publication processes.
- Collaborating with department faculty to strengthen the curriculum and integrate real-world data applications into coursework.
- Contributing to academic service and departmental initiatives aimed at improving student outcomes and advancing the data science discipline.
- Designing and delivering interactive lectures covering classification, clustering, association rules, dimensionality reduction, and OLAP/ETL concepts, fostering strong analytical skills among students.

Adjunct Instructor

New York | United States

CLARKSON UNIVERSITY

Jan 2025 – June 2025

- Taught Data Mining and Data Warehousing courses to undergraduate and graduate students, integrating real-world applications and hands-on projects to enhance conceptual understanding.
- Designed and delivered interactive lectures covering classification, clustering, association rules, dimensionality reduction, and OLAP/ETL concepts, fostering strong analytical skills among students.
- Developed assignments and mini-projects using tools such as Python (pandas, scikit-learn), SQL, and Power BI, enabling students to gain practical experience with industry-standard tools.
- Mentored students on capstone projects involving real-world datasets, guiding them through data preprocessing, model development, and evaluation techniques.
- Received positive student feedback for clear communication, strong course organization, and relevance to current industry practices in data science.
- Collaborated with faculty and academic advisors to ensure course alignment with program objectives and learning outcomes.

Data Engineering Intern

Chicago | United States

IN BOLD PRINT

May 2024 – Dec 2024

- Automated the calculation of emission factors using the Climatiq API, reducing manual effort by 85%.

- Analyzed financial transaction data from the source and compared it with the API input parameters to determine relevant fields for emissions calculations, ensuring accurate API integration and field mapping.
- Developed and integrated the ETL process with Snowflake databases using Python and Snowflake connectors, facilitating efficient data extraction, transformation, and loading while ensuring proper datatype mapping.
- Created a Google Cloud Function to trigger the emission factor calculation via an HTTP request, enabling seamless integration and automated workflows.
- Established quality assurance (QA) to verify the accuracy of the emissions data received from the Climatiq API, including consistency checks and adding inflation adjustments based on the transaction year from the source and the emission factor year from the API.
- Optimized the codebase to handle a batch of data at a time, reducing processing time by 25%.

Associate Consultant

Pune | India

Northern Trust | Banking Industry

Nov 2020 – Aug 2023

- Hands-on experience with SWIFT, FED, and CHIPS payments, including ISO 15022 and 20022 messaging formats, and knowledge of regulatory enhancements for SWIFT and CHIPS.
- Involved in analyzing, developing, testing, and implementing system capabilities for MTS, GPP, UPP, and Intellitracs, with expertise in automating workflows and optimizing payment processes.
- Configured and deployed Money Transfer System (MTS), Global Payments Processing (GPP) and Universal Payments Processing (UPP) systems, ensuring seamless real-time payment processing and message flows.
- Managed SWIFT infrastructure components, and handled patch installations, user management, and system updates, ensuring stable and compliant operations.
- Developed and executed User Validation Tests, analyzed bug defects, and provided solutions for critical issues related to MTS and SWIFT applications.
- Individually handled business requirements, provided functional solutions and design, assisted with testing story points, and did user verification testing for Project Go-lives.
- Identifying system and functional gaps in the Money Transfer System (MTS) to ensure Financial Institutes Clearing transactions are processed without stopping in Repair.

Software Developer

Pune | India

Amdocs DVCI | Telecom Industry

May 2016 – Nov 2020

- A dynamic professional Java Developer with hands-on experience in Amdocs Billing, Usage processing, Turbocharging, and Customer and Replenishment Management with JAVA, SQL, and UNIX Shell Scripting.
- Excellent Knowledge of Telecom Domain experience in Production Development & Maintenance area.
- Managed all the Amdocs product-related issues from clients such as Online Charging (OLC), Customer management and Replenishment management (CM/RPL), Turbo Charging, etc.
- Having good knowledge in CORE JAVA, UNIX commands & Shell Scripting, and SQL & PL/SQL queries.
- Exposure to writing scripts to reduce manual intervention and excellent Technical and logical skills and Strong problem-solving skills as well as Debugging skills.
- Reviewing checklists for Release, Build, System & DB Migration, OS patching, and System failover/failback.
- Explicit Experience in end-to-end development of Change Requests, enhancement, and maintenance using diverse technologies.

Skills

- Industry Applications: MTS (Money Transfer System), GPP (Global Payments Processing), UPP(Universal Payments Processing), Intellitracs, Ensemble -CSM, CRM, Enabler -CM/RPL, OLC, Turbo Charging (TC), Amdocs Billing, Transmission, Accounts Receivable (AR), Invoicing.
- Programming Languages: Entia Shell Scripting on UNIX, Core JAVA, SQL & PL/SQL, Python, Excel Macro.
- Databases: Toad, SQL Developer, MySQL, RGW (Relational Gateway), Snowflake
- Operating systems: UNIX, LINUX, Windows, MAC OS
- Change management Tools: HP QC, UTS Ticketing Tool, Putty, Quality Centre, ServiceNow, APV Diagnostics.
- Development Tools: Service now, JIRA, GitHub, Jenkins, ERD, Tableau, MobaxTerm, STS.
- Cloud Platforms: Microsoft Azure, Google Cloud Platform
- Code Editors: MS Office, Visual Studio, Eclipse, Notepad, Notepad++, PyCharm, IntelliJ Idea, Netbeans.
- Machine Learning Libraries: TensorFlow, Scikit-learn, SciPy, Numpy, Pandas, XGBoost
- Data Visualization Tools: Matplotlib, Seaborn, Plotly, Tableau, Power BI, ggplot2
- Soft Skills : Problem-Solving , Team Collaboration, Adaptability, Communication, Time Management, Attention to Detail, Critical Thinking

Education

Master of Science (MS)

Applied Data Science | Clarkson University | 4.0/4.0 CGPA

Master of Technology (M-Tech)

Data Science | BITS PILANI (WILP) | 6.8/10 CGPA

Bachelor of Technology (B-Tech)

Electronics and Communication Engineering | SVCET (Affiliated to JNTU) | 78%

Board of Intermediate Education

MPC | Sri Vidya Vikas Junior College | 95%

Board of Secondary School Certificate

SSC | Vignana Deepthi English Medium High School | 90%

Potsdam, NewYork | United States

Aug 2023 – Dec 2024

Hyderabad | India

2018 –2020

Chittoor | India

2011 –2015

Chittoor | India

2009 – 2011

Chittoor | India

2009

Academic Projects

Aug 2023–Dec 2024

Relevant Course Work: Database Model, Design and Implementation; Data warehousing; Information Visualization; Probability & Statistics; Data Mining; Machine Learning

- **COVID-19 India Dashboard Analysis:** Developed interactive dashboards in Tableau and applied statistical techniques in R to analyze COVID-19 data trends, recovery rates, and mortality across India, providing clear insights for decision-makers.
- **Credit Card Complaint Dashboard:** Created Tableau dashboards to visualize credit card complaint data, using R for data preprocessing to identify patterns and insights that improved customer service strategies.
- **Income Prediction and Donor Classification:** Built a predictive model using machine learning to classify income levels and identify potential donors based on U.S. Census data, aiding marketing and financial decision-making.
- **Heart Attack Prediction Using Data Mining:** Developed a predictive model using data mining techniques to assess heart attack risk, offering actionable insights for healthcare professionals to enhance preventive care.
- **Predictive Analysis for Installation Jobs at Zutek, LLC:** Employed machine learning to forecast labor hours and costs for kiosk installations, optimizing resource allocation and project planning for Dunkin' locations.
- **Churn Retention Using Data Science Techniques:** Developed a model to predict customer churn using Python, R, SQL, and Tableau, enhancing retention strategies through targeted marketing campaigns and behavior analysis.