



## Venkata Tarun Kumar Mavillapalli

**Nationality:** Indian **Date of birth:** 17 Jul 1999 **Phone number:** (+39) 3478420332

**Email address:** [mvtkop760@gmail.com](mailto:mvtkop760@gmail.com)

**LinkedIn:** <https://www.linkedin.com/in/venkata-tarun-kumar-mavillapalli-967b4613a/>

**Website:** <https://venkatatarunkumarmavillapalli.github.io/Portfolio/>

**Home:** via ferrar, 4, virgillita 59, Garibaldi, Naples, 80143, 80143 Naples (Italy)

### ABOUT ME

I am a dedicated Data Science Master's student at UNINA and enrolled in Apple Developer Academy with a Bachelor's in Computer Science. Proficient in Python, R, SQL, and various data analysis tools, My goal is to leverage my skills in data science, machine learning, cloud computing, digital transformation, business intelligence, analytics, and project management to gain hands-on experience. I am eager to learn from industry experts, collaborate with talented professionals, and contribute to the growth and success of the industry. Open to any opportunity and apply my expertise to drive actionable insights from data. You can view my certifications and projects on my portfolio.

### EDUCATION AND TRAINING

#### Masters Degree, Data Science

*University of Naples Federico II* [ 1 Oct 2022 – Current ]

#### Apple Developer Academy

*Apple - Unina Federico II* [ 25 Sep 2023 – 26 Jun 2024 ]

#### Bachelor of Technology, Computer Science Engineering - 3 Continental

*Amity University , Birkbeck University - London, Adelphi University - New York* [

1 Aug 2016 – 15 Jul 2020 ]

### PROFESSIONAL CERTIFICATIONS

#### IBM Machine Learning

[ 10 Jun 2023 – 11 Sep 2023 ]

I am certified in "IBM Machine Learning Professional Certificate" from Coursera & IBM, encompassing 6 courses with a focus on machine learning theory and practice. The capstone project involved building recommender systems, employing various unsupervised and supervised algorithms and utilizing tools like Jupyter Notebooks, Watson Studio, and libraries such as Scikit-learn, Keras, and TensorFlow.

Link: <https://coursera.org/verify/professional-cert/DDTCETTDZ5F8>

#### Google Business Intelligence

[ 1 Mar 2023 – 30 Apr 2023 ]

I've gained expertise in Business Intelligence with skills spanning data modeling, data pipelines (ETL/ELT), dashboarding, and data visualization tools like Tableau. Completed projects showcase structured thinking, stakeholder collaboration, and data-driven solutions using BigQuery and Google DataFlow. Completed 2 End-of-Course Projects which are Cyclist Scenario & Google Fiber Scenario

Link: <https://coursera.org/verify/professional-cert/CTMS6LBYS4EW>

## Google Cloud Digital Leader Training

[ 1 Apr 2023 – 10 May 2023 ]

Google Cloud Digital Leader Training provided extensive knowledge in Digital Transformation, Data Innovation, and Cloud Security. Equipped to drive digital transformation and excel in the ever-evolving cloud technology landscape.

Link: <https://coursera.org/verify/professional-cert/WS64K6GD43PB>

## Google Data Analytics

[ 1 Oct 2022 – 1 Apr 2023 ]

This comprehensive program covers foundational data analysis skills, question formulation, ethical data practices, data processing, analysis techniques, data visualization, coding in R, and culminates in a capstone project to showcase employability and expertise in data analytics.

Link: <https://coursera.org/verify/professional-cert/HRZ7REAXLZG8>

## Google Project Management

[ 1 Nov 2022 – 11 Apr 2023 ]

Mastered risk management, process improvement, budgeting, and Agile project management, culminating in a capstone project. This program provides the latest tools and skills to enhance project delivery. Completed a capstone project. Ready to apply expertise for exceptional results.

Link: <https://coursera.org/verify/professional-cert/UT9VFSLCHP57>

## PROCESS MANAGEMENT

---

### Quality Management Systems - British Standards Institution

[ Aug 2018 – Dec 2018 ]

BSI, a global leader, offers quality management system certification based on ISO 9001:2015, enhancing organizations' practices to meet customer requirements and reduce defects, applicable across industries and sizes.

Certificate No: AUBSI-QMS01-1823-0012

## RISK MANAGEMENT

---

### Risk Management System - British Standards Institution

[ Aug 2019 – Jan 2020 ]

BSI's Risk Management Systems standard, based on ISO 31000:2018, offers a systematic framework for organizations to enhance risk management across all industries and sizes, addressing risk understanding, assessment, treatment, communication, and monitoring.

Certificate No: AUBSI-RMS01-1925-0014.

## PROJECTS

---

### Data Mining - Fake and Real News Detection using a Chatbot.

[ 19 Jun 2023 – 17 Aug 2023 ]

Data cleaning and EDA provided insights into data patterns, Feature engineering with TF-IDF vectorization prepared text data for ML models, CNN outperformed various models in real vs. fake news classification. Hyperparameter tuning and cross-validation optimized and validated the CNN model. CNN-based chatbot integration enhances news authenticity prediction and model updates based on feedback.

### Forecasting Weight Dynamics and Visualizing Historical Data A Time Series Analysis

[ 10 Jun 2023 – 11 Jul 2023 ]

Our Objective is to Forecast insect colony weight with time series analysis, visualizing data in a Power BI dashboard. Performed EDA, feature engineering, and developed interpretable forecasting models. Evaluated using metrics (MSE, RMSE, MAPE) and presented insights.

## Statistical Data Analysis on Human Activity Recognition Data Set

[ 1 Jan 2023 – 28 Mar 2023 ]

Analyzed the Human Activity Recognition Dataset for healthcare monitoring app development using sensors. Conducted data pre-processing, clustering, and correlation analysis. Employed various classification models, including SVM, Logistic Regression, Decision Tree, and Random Forest, followed by K-fold cross-validation for model assessment.

## Missing Value Imputation for Titanic Dataset using mean imputation technique in OpenMp

[ 5 Apr 2023 – 10 Jul 2023 ]

Missing value imputation for titanic dataset using mean imputation technique in Openmp and plotted a graph for execution time Vs number of threads. It is a Final Group Project, for Data Management & Computer Networks. We have used The UNINA cluster(University): 32 nodes, 128 GPUs. Accessing the cluster: the user interface. Programming with MPI and Open MPI. Programming in CUDA. We have submitted our work to Prof. Guido Russo which got a great Result.

## Predicting Housing Price of California Census Data using Machine Learning

[ 1 Jan 2023 – 5 Mar 2023 ]

Our task was to build a model to predict housing prices in California districts. Explored data, pre-processed, developed, and fine-tuned a Random Forest model, using RMSE for evaluation.

## PUBLICATIONS

---

### The Machine Predicted Market

[2018]

International Conference on Computational Techniques, Electronics and Mechanical Systems (CTEMS)

Link: <https://ieeexplore.ieee.org/document/8769306>

## WORK EXPERIENCE

---

### Associate Salesforce AI/ChatBot Developer

*Neuraflash, Hyderabad, INDIA*, [ 1 Feb 2021 – 19 Aug 2022 ]

1. Worked on Salesforce Admin/configuration activities: Flows, Creating Email templates, validation Rules, Objects, Permission sets, Profiles, Page layouts, Sharing settings, creating Reports, dashboards.
2. Worked in AWS on Amazon connect flows, on Chat bot Configuration/Development, an Support Engineering(Production Support)
3. Got used to many tools like Lucid Charts: GitHub/Version control, Jira board, Data Loader, Atlassian: Confluence, OpsGenie, PingID and many on.

### Team Member

*A.J. Drexel Autism Institute, Philadelphia, USA* [ 1 May 2019 – 30 Jul 2019 ]

1. **Redesigning the Website section/database development for A. J. Drexel Autism Institute, Philadelphia - Internship.**
2. Engineered website with mobile-first design, 2x faster than legacy website, as well as created new UX components. Led CS team of Amity University students in collaboration with business students from Drexel University. Supervised creation of database for the website and delegated tasks, implemented Scrum methodology

## SKILLS

---

### Technical & Soft Skills

**Programming Languages:** Python, R

**Data Analysis Tools:** Jupyter Notebook, RStudio, Tableau, Power BI, Excel

**Data Preprocessing:** Data Cleaning, EDA, Feature Engineering

**Data Manipulation:** Pandas, NumPy

**Data Visualization:** Matplotlib, Seaborn, Plotly, Creating insightful graphs and charts, Storytelling with data

**Big Data Technologies:** Hadoop, Spark

**Database Management:** SQL, NoSQL

**Cloud Computing:** Google Cloud, AWS.

**Data Mining and Processing:** Web Scraping, ETL (Extract, Transform, Load), Data Warehousing

**Statistical Skills:** Descriptive Statistics, Inferential Statistics, Time Series Analysis, Hypothesis Testing, Bayesian Statistics, Regression

**Machine Learning:** Supervised Learning, Unsupervised Learning, Classification, Regression, Clustering, Dimensionality Reduction, Ensemble Methods, Scikit-Learn, TensorFlow, Keras

**Deep Learning:** Neural Networks, Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN), LSTM, GRU, Natural Language Processing (NLP) with Deep Learning

**Tools and Frameworks:** Git/GitHub

**Soft Skills:** Problem-Solving, Critical Thinking, Communication, Teamwork, Project Management, Adaptability, Data Ethics and Privacy.