

# Tanay Agrawal

[tanayagrawal799@gmail.com](mailto:tanayagrawal799@gmail.com) | +1 (812) 327 3807 | [www.linkedin.com/in/tanay-agrawal-9217801ab](https://www.linkedin.com/in/tanay-agrawal-9217801ab)

## EDUCATION

**Indiana University, Bloomington, IN, USA**

**May 2023**

**Master of Science in Data Science**

**GPA: 3.90/4.0**

*Relevant coursework:* Statistics, Artificial Intelligence, Data Mining, Machine Learning, Algorithms

**NMIMS University, Mumbai, India**

**May 2021**

**Bachelor of Technology in Electronics and Telecommunication**

**GPA: 3.62/4.0**

*Named in the Dean's Merit List for achieving a rank in top 5 for highest Academic achievement*

*Relevant coursework:* Business Analytics and Visualization, Programming for Analytics (SAS),

Image Processing, Advance Business Statistics, Fuzzy Logic Neural Networks, Probability and Random processes.

## TECHNICAL SKILLS

**Languages:** C, C++, Java, Python, R, MATLAB, VHDL, HTML, CSS, JavaScript, Vue.js, SQL, SAS Programming

**Analytics:** SAS studio, R Studio, Google Data Analytics, Tableau, Power BI

**Tools:** Git, NumPy, Pandas, Seaborn, Matplotlib, Scikit-learn, SciPy, Keras, Raspberry Pi, Ansys HFSS, Xilinx Vivado, AutoCAD, Adobe Creative Cloud, PyCharm, Google Colab, Google firebase, PostgreSQL, Visual Studio, Keil, Anaconda

## PROFESSIONAL EXPERIENCE

**Indiana University, Bloomington, IN, USA**

**August 2021 – Present**

*Graduate Teaching Assistant – Data Analytics and Modelling, Statistics and R-Programming*

- Collaborating with teaching faculty for a class of **Graduate course students** on the coursework with responsibility of conducting online live lab sessions focusing on performing advance regression and modelling using R programming for Data Analytics, Weekly office hours along with project guidance and review for the students.

**Codearray Technologies, Mumbai, India**

**April 2021 – June 2021**

*Junior Web Developer*

- Creating and hosting single page web applications using Vue.js for frontend development.
- Contribution in applications testing using Google Firebase for backend development and authentication management.

**Technotix, Mumbai, India**

**May 2019 – March 2020**

*Manufacturing Department Co-Head*

- Designed and manufactured a human sized robot and Quadcopter for Technoxian 2019 using computer simulation on MATLAB and Solidworks, along with emphasis on flight stability and turbulence control for the quadcopter.
- Achieved a shot accuracy of **92.11%** on 3 soccer playing robots using Embedded C language on an 8051 micro-controller with sensors enabled to detect the ball.

## ACADEMIC PROJECTS

**Market Analytics – Salesforce project**

**January 2022 - Present**

- Project on analytics of a social media-based dataset to draw comparison between salesforce in house analytic tool 'Datorama' and its competitor analytics tools such as funnel.io.

**Car Damage Detection and Classification Model**

**October 2021 – December 2021**

*Technologies used: Python (Libraries – pandas, numpy, matplotlib, keras, sklearn, tensorflow, imutils, os, sys)*

- Developed a system for purpose of automating the detection of damage severity in vehicles for faster insurance claim, by using Computer Vision techniques through EfficientNet providing an **accuracy of 83%**.

**Dynamic Traffic Optimization System**

**August 2020 – March 2021**

*Technologies used: Python (Libraries – pandas, numpy, matplotlib, keras, sklearn, tensorflow, imutils, os, sys)*

- Implemented a traffic management software based on live traffic feed video for controlling traffic through dynamic monitoring of pedestrian density for every location using YOLO v3.
- Designed driver drowsiness detection algorithm with accuracy of **96.11%** for prevention of road accidents.

**Crime Rate Analysis**

**February 2020 – March 2020**

- Implemented drag analysis using SAS on a crime record data set, used filtering and visualization to analyze States with highest crime rate based on population and categories of crimes. Leveraged the report to make recommendations for distribution of armed forces across various counties in State.

**Real-time heart rate monitoring system and Panic assist algorithm**

**July 2019 – October 2019**

- Programmed a microcontroller for monitoring body vitals such as heart rate using sensors and portably collecting and real-time body vital status using thingspeak platform.