



# ARTIVERSE 2.0

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**Team Name : Tech Magic**

**Theme : Student Innovativation**

**Title :AI-Driven Grievance Redressal System for Public Service Enhancement**

**Team Members**

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## ABSTRACT

- **The AI-Driven Grievance Redressal System addresses inefficiencies in public service complaint handling, such as delayed responses, poor categorization, and lack of transparency.**
- **Leveraging advanced technologies like Natural Language Processing (NLP) and Machine Learning (ML), the system automates complaint categorization, prioritization, and routing to relevant departments. Citizens can submit grievances via a chatbot interface, which processes their complaints and provides real-time updates on status.**
- **The system incorporates geolocation APIs to pinpoint complaint locations for rapid action while ensuring secure data handling through robust database management systems like MongoDB.**
- **This innovative approach improves service efficiency, reduces response times, and builds public trust, creating a transparent and responsive system for enhancing urban service delivery and citizen satisfaction.**

## **KEYWORDS:**

**AI-Driven Grievance System, Complaint Management, Public Service Optimization, NLP and ML Integration, Chatbot Interaction, Geolocation-Based Solutions, Real-Time Status Updates, Data Security, Database Management, Citizen-Centric Approach, Transparency in Governance, Rapid Response Mechanism, Service Efficiency Enhancement, Urban Development, Technology-Enabled Solutions**

## **PROGRAMMING LANGUAGES & TOOLS:**

- 1. Python:** For AI/ML algorithms, including NLP and Generative AI, using libraries like TensorFlow, PyTorch, and NLTK.
- 2. JavaScript:** For chatbot development and frontend frameworks like React or Angular, and backend with Node.js.
- 3. HTML/CSS:** For building and styling the web-based user interface.
- 4. SQL/NoSQL:** For managing databases, with MongoDB as a NoSQL option.
- 5. Swift/Kotlin:** For mobile app development on iOS and Android.
- 6. PHP (optional):** For backend scripting, if required.

