

# TUSHAR KOUSHIK

Boston, MA | (720) 757-3965 | [tusssars11@gmail.com](mailto:tusssars11@gmail.com) | [LinkedIn](#)

---

## EDUCATION

### **Wheaton College, Norton, MA**

Double Major: Computer Science and Data Science.

| Expected: May 2026

Relevant Coursework: Database Management Systems, Data Science, Statistical Analysis, Mobile Computing, Methods of Data Analysis, Linear Algebra, Operations Research, Machine Learning, Applied Artificial Intelligence, Algorithms.

### **Massachusetts Institute of Technology, Breakthrough Tech AI**

Program: Machine Learning and AI Studio

| May 2024 – May 2025

## PROJECTS

### **Hepatitis C Outbreak Simulator (R Studio)**

- Built and analyzed a Susceptible-Exposed-Infectious-Recovered (SEIR) model to predict infection trends using simulations and differential equations.
- Visualized infection patterns to derive actionable public health insights.

### **Dynamic Insights Explorer (Python)**

- Designed an interactive data visualization tool with Pandas, Matplotlib, and Streamlit, enabling users to identify trends and correlations efficiently.
- Improved accessibility for non-technical users with intuitive dashboard features.

### **NASA Sponsored COSGC Robotics Competition (Arduino)**

- Implemented sensor systems for navigating complex terrains in robotics applications.
- Awarded "Outstanding Demonstration of Advanced Autonomy" for innovative technical designs.

### **Wheaton Marketplace (Android Development)**

- Developed a mobile app for campus-wide item exchanges, featuring secure login and real-time database synchronization using Java and Firebase.
- Incorporated analytics to study user engagement and optimize functionality.

## EXPERIENCE

### **USDA Grant Research Assistant – Wheaton College**

September 2023 – Present

- Compiled and cleaned county-level data for 20 states from diverse digital and census sources.
- Standardized and analyzed datasets with over 100 variables for use in policy research.

### **Machine Learning Fellow – NeoViews**

August 2024 – December 2024

- Analyzed and developed ML models to estimate positions and locations using tracking data, leveraging regression techniques and multivariate distribution estimation to address missing data challenges.

### **Teaching Assistant – AI for Good**

June 2024 – August 2024

- Mentored pre-college students in data science concepts and practical AI applications, emphasizing ethics and societal impact.
- Supported students in developing and presenting project-based solutions using AI tools.

## LEADERSHIP EXPERIENCE

### **Social Media Manager – Intercultural Board Club, Wheaton College**

- Managed events and analyzed engagement metrics, increasing audience interaction by 20%.

### **Residential Advisor – Pine Residential Hall, Wheaton College**

- Fostered a collaborative and inclusive community for 50+ residents, coordinating events and resolving conflicts.

## SKILLS

**Programming Languages:** Python, SQL, R, Java, C++

**Technical Tools:** Mathematica, Tableau, MongoDB, Microsoft 365 and Google Workspace

## CERTIFICATIONS:

**Machine Learning Foundations** : Cornell University