

# Nitin Gupta

 $\square$  +1 803 470 9214  $\square$  niting1209@gmail.com  $\square$  g-nitin  $\square$  Columbia, SC  $\square$ 

#### EDUCATION

#### University of South Carolina (Aug 2021 - May 2025)

GPA: 4.0/4.0

B.S.: Computer Science; Minors: Mathematics, Data Science

President's Honor List (since Aug '21)

Relevant coursework: Artificial Intelligence, Big Data Analytics, Software Engineering, Database Design

### SKILLS

Advanced in Python, Java, C++, Linux, git, LATEX

Native in English, Hindi, Punjabi

Intermediate in PyTorch, SQL, NoSQL, R, Apache Hadoop

**Proficient** in Spanish

#### EXPERIENCE

Columbia, SC AI Researcher

AI Institute of USC, University of South Carolina

Aug 2024 - Present

- Developing innovative chatbot systems to promote voter participation among vulnerable groups
- Developing automated literature categorization tools, contributing to advancements in AI applications

#### Volunteering Ambassador

Columbia, SC

Trew Friends Promoted organ, eye, and tissue donation, informing and educating people about the importance of donation.

• Successfully persuaded over 300 individuals to register as donors on the national organ donor registry.

#### Explainable AI Research Intern

Columbia, SC

Aug 2021 - Present

AI Institute of USC

May 2024 - Aug 2024

- Developed a framework using Natural Language Processing and enriched knowledge graphs to generate transparent, context-aware explanations for AI-generated plans
- Conducted traffic data analysis for the SCDEC by identifying collision patterns and evaluating safety programs

#### Machine Learning Researcher

Columbia, SC

Digital Research Services, University of South Carolina

Aug 2022 - Apr 2024

- · Conducted data mining on South Carolina Laws using Python and Natural Language Processing
- Trained machine-learning algorithms to study the prepared session laws and identify Jim Crow Language

#### Material Analysis Researcher

Columbia, SC

Jefferson Lab, University of South Carolina

Jun 2022 - Oct 2022

• Enhanced high energy physics research by developing C++ analysis code to process simulated data for various magnet materials, leading to potential cost savings of over \$1,000,000

# **Publications**

# Towards Enhancing Road Safety in South Carolina Using Insights from Traffic

and Driver-Education Data

AAAI 2025

N. Gupta, B. Muppasani, S. Srivastava, A. Goel, et al.

Under Review

ElectionBot-SC: A Tool to Understand and Compare Chatbot Behavior for

AAAI 2025

Safe Election Information in South Carolina B. Muppasani, K. Lakkaraju, N. Gupta, V. Nagpal, S. Jones, B. Srivastava

Under Review

Building a Plan Ontology to Represent and Exploit Planning Knowledge and

CODS-COMAD 2024

Its Applications B. Muppasani, N. Gupta, V. Pallagani, B. Srivastava, et al.

Accepted

## AWARDS & ACHIEVEMENTS

McNAIR Junior Fellowship for undergraduate computer science research.

May 2024

Phi Beta Kappa Freshman Award for outstanding academic performance at USC.

Apr 2023

Research Presentation at CEU to computer science and nuclear physics professionals.

Oct 2022

## Personal Projects

Segify: Semantic Segmentation for Localized Artistic Effects

**O** g-nitin/stylized-segmentation

• Built a neural style transfer app enabling real-time, localized style transfer using SoTA segmentation techniques

Deep Learning & Autoencoders for Colorization

• g-nitin/convolutional-autoencoder

• Developed a convolutional autoencoder for accurate image colorization of b/w photos using PyTorch on 28,000 images