Nitin Gupta

in niting9 | +1 803 470 9214 | niting1209@gmail.com | g-nitin | Columbia, SC | Portfolio

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, Machine Learning Systems, Big Data Analytics, Software Engineering, Computer Architecture, Database Design

Skills

Advanced in Python, PyTorch, Java, C++, Linux, git, LaTeX

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

Native in English, Hindi, Punjabi

Proficient in Spanish

Experience

AI Researcher Columbia, SC

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 *Aug 2021 – Present*

- 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

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 (Accepted)*

N. Gupta, B. Muppasani, et al.

Building a Plan Ontology to Represent and Exploit Planning Knowledge and Its Applications *CODS-COMAD 2024 (Accepted)*

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

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 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